

**VASAVI COLLEGE OF ENGINEERING(Autonomous)
Accredited by NAAC with A++
IBRAHIMBAGH, HYDERABAD-31**

Approved by A.I.C.T.E., New Delhi and
Affiliated to Osmania University, Hyderabad-07

**Sponsored by
VASAVI ACADEMY OF EDUCATION
Hyderabad**



**STUDENT HAND BOOK
2022-23**

**Academic Regulations for B.E Program
under CHOICE BASED CREDIT SYSTEM (CBCS)
for the students admitted in the
Academic Year 2022-23**

**+91-40-23146003, 23146002
Fax: +91-40-23146090
Website: www.vce.ac.in**

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ABOUT THE COLLEGE

VISION

Striving for a symbiosis of technological excellence and human values

Established in 1981 by Vasavi Academy of Education under the stewardship of Late Sri Pendekanti Venkata Subbaiah, a veteran statesman of independent India and by a few eminent people from

different walks of life Vasavi College of Engineering represents a rich tradition of excellence in technology-based education in a stimulating environment. From a modest beginning, with just three undergraduate programs, viz., B.E. programs in Civil, Mechanical and Electronics & Communication Engineering, with dedicated efforts for over 40 years, it has now grown into a mighty center of learning with excellent and well-developed infrastructural facilities, offering 7 undergraduate programs, viz., B.E. in Civil, Mechanical, Electrical & Electronics, Electronics & Communication Engineering, Computer Science & Engineering, AI & ML and Information Technology. In addition to this 2-Year Postgraduate Programmes in CSE, ECE, EEE and Mechanical Engineering are also being offered.

Five undergraduate (B.E) programs were accredited by National Board of Accreditation (NBA) for three years from 2017 onwards. Two PG programs in Engineering namely M.E (ECE-

Embedded Systems & VLSI Design

and M.E (Advanced Design & Manufacturing- Mechanical) and MCA were also accredited by NBA for two years from 2017 onwards. The college has been recognized under 12(B) and 2(F) sections of the University Grants Commission (UGC) Act.

MISSION

To arm young brains with competitive technology and nurture holistic development of individuals for a better tomorrow

The college has been granted ***autonomy by the University Grants Commission***, New Delhi and Osmania University, Hyderabad for all the programs for a period of six years with effect from 2014-15. The College has been accredited with a CGPA of 3.51 and received A++ Grade on a Seven-point Scale for a period of five years w.e.f 2020-2021. Based on Institute's NAAC 'A++' grade, University Grants Commission has extended the autonomous status of the institute for a period of ten (10) years from the session 2020-21 to 2030-31.

Now, the college is implementing ***Choice Based Credit System (CBCS) w.e.f 2016-17 Academic Year for both UG and PG programmes offered by it.***

The College has highly qualified and experienced faculty consisting of Professors, Associate Professors and Assistant Professors and technical and supporting staff. The college has very good infrastructural facilities which go beyond the curriculum requirements. The college offers value-added courses in GIS, CAD/CAM, DSP, VLSI, Networking, J2EE and communication skills to bridge the gap between the curriculum and the requirements of the industry. Skill Development courses have been made part of the curriculum from the second year onwards to improve the skills of the students.

A Research & Development (R&D) Cell is established by personnel from industry / research organization to encourage the faculty and the students in acquiring additional qualifications and knowledge.

This Cell also facilitates the faculty for interaction with industry/research organizations in getting sponsored research projects. In addition, the

college extends Consultancy Services in various fields of engineering

QUALITY POLICY

Education without quality is like a flower without fragrance. It is our earnest resolve to strive towards high standards of teaching, training and developing human resources.

and technology.

The Center for Counseling and Placement at Vasavi College of Engineering provides personal and career-related support to its students. The educational experience at the college is enlivened and enriched by an array of extra-curricular activities to fulfill the cultural and emotional needs of students.

A good number of ranks in university examinations are secured by our students every year. The all-round development of a student is achieved by exposing him/her to the outside world in a systematic and well planned manner through internships and industry related projects. In keeping with our vision statement human values and professional ethics are infused in the curriculum. This blend of values and technology makes Vasavi a preferred place for learning.

VASAVI ACADEMY OF EDUCATION (VAE)

GOVERNING BODY MEMBERS

1	Sri P. Ramamohan Rao	:	President
2	Prof. T.V. Subba Rao	:	Vice-President
3	Sri M. Krishna Murthy	:	Secretary
4	Sri V.M. Parthasarathi	:	Treasurer
5	Sri K. Ashok Kumar	:	Member
6	Sri P. Balaji	:	Member
7	Smt. P. Indrani	:	Member
8	Sri P. Gouri Prasad	:	Member
9	Prof. T. Revathy	:	Member
10	Prof. (Dr.) V. Srinivasulu	:	Member
11	Sri Lagisetty Subbagurumurthi	:	Member

INSTITUTIONS SPONSORED BY VASAVI ACADEMY OF EDUCATION

INSTITUTION	ESTABLISHED
Vasavi College of Engineering	1981
Vasavi Public School	1983
Vasavi Polytechnic	1984
Pendekanti Law College	1990
Pendekanti Institute of Management	1991
Vasavi College of Music & Dance	1996

VASAVI COLLEGE OF ENGINEERING MANAGING COMMITTEE

1	Sri P.Ramamohan Rao	President
2	Prof. T.V. Subba Rao	Vice President
3	Sri M. Krishna Murthy	Secretary
4	Sri V.M. Parthasarathi	Treasurer
5	Sri K. Vasudeva Gupta	Member
6	Dr. S. V. Ramana	Principal & Ex-Officio Member

Principal : Prof. S.V. Ramana
 Telephone No : +91-40-23146002
 Fax : +91-40-23146090
 Website : www.vce.ac.in
 E-mail : principal@staff.vce.ac.in

VASAVI COLLEGE OF ENGINEERING (Autonomous)

BOARD OF GOVERNORS

1	Prof. D.N. Reddy, Former Director C R Rao Advanced Institute of Mathematics Statistics and Computer Science, University of Hyderabad Campus, Hyderabad and Former Vice-Chancellor, JNTU-Hyderabad	: Chairman
2	Prof. Praveen Kumar, Department of Civil Engineering Indian Institute of Technology Roorkee UGC Nominee	: Member
3	Prof. Raga Rajendra Department of Mechanical Engineering University College of Engineering Osmania University Univeristy Nominee	: Member
4	CTE Nominee O/O Commissioner Technical Education, Telangana	: Member
5	Dr. N. Venkata Reddy, Professor Department of Mechanical & Aerospace Engineering, IIT-Hyderabad	: Member
6	Sri G. Yoganand, Managing Director M/s Manjeera Constructions, Hyderabad	: Member
7	Sri P. Ramamohan Rao, President Vasavi Academy of Education (Management Nominee)	: Member
8	Prof. T.V. Subba Rao, Vice President, Vasavi Academy of Education (Management Nominee)	: Member
9	Sri M. Krishna Murthy, Secretary Vasavi Academy of Education (Management Nominee)	: Member
10	Sri V.M. Parthasarathi, Director Finance Vasavi Academy of Education (Management Nominee)	: Member
11	Sri P. Balaji, Member Vasavi Academy of Education (Management Nominee)	: Member

12	Mr. G. Sudhakar Chief Executive Officer, Jupiter Capital Pvt Ltd Bangalore (Management Nominee)	: Member
13	Dr. A.S. Saiprasad, Director (A & A), Professor HoD-Physics, Vasavi College of Engineering	: Member
14	Dr.P.Hemagiri Rao , Professor of mathematics & Controller of Examination, VCE	: Member
15	Dr. S. V. Ramana, Principal Vasavi College of Engineering	: Member- Secretary

STUDENT PERSONAL DATA

Name :
Hall Ticket No. :
Class :
Branch:
Address :

PHOTO

Phone Nos. :
Home :
Mobile :
E-mail ID :
Bank A/c. No. :
Credit Card No. :
Passport No. :
Driving License :
Vehicle No :

Medical Information

Height :
Weight :
Blood Group :

In case of Emergency, Contact

Name :
Phone No. :

Name :
Phone No. :

COLLEGE PROFILE

Vasavi College of Engineering, established in 1981, a self-financed institution, affiliated to Osmania University, Hyderabad and approved by AICTE, New Delhi, offers the following courses:

Branch	Starting Year	Intake (2022-23)
4-Year Undergraduate Programs		
Civil Engineering	1981	60
Electronics & Communication Engineering	1981	180
Mechanical Engineering	1981	120
Computer Science & Engineering	1994	120
Computer Science & Engineering (AI & ML)	2020	60
Electrical & Electronics Engineering	1999	60
Information Technology	2000	180
2-Year PG Programs (Full-time 4 Semesters)		
Embedded Systems & VLSI Design (ECE)	2003	18
Communication Engineering & Signal Processing (ECE)	2011	18
Advanced Design & Manufacturing (Mechanical)	2003	18
Computer Science & Engineering (CSE)	2011	18
Power Systems and Power Electronics (EEE)	2012	24

Five U.G programs Civil, ECE, Mech. , CSE and EEE are accredited by National Board of Accreditation (NBA) up to 30.06.2024. The Departments Computer Science & Engineering (**CSE**), Electronics & Communication Engineering (**ECE**), Electrical and Electronics Engineering (**EEE**) and Mechanical Engineering (**ME**) have been recognized by the Osmania University, Hyderabad as **Research Centers**.

The college is accredited by NAAC with A++ grade and the autonomous status of the college is extended up to 2030-31. Some of the faculty members from various Departments, have been recognized as research supervisors by the Osmania University and JNTU-Hyderabad.

INFRASTRUCTURE

Vasavi, in its constant pursuit of offering quality education, has created excellent infrastructural facilities for all the programs and established certain advanced laboratories such as, CISCO Networking Lab, VLSI Design Centre, Embedded Systems, DSP, CAD/CAM and GIS dealing with contemporary technologies. Common facilities for the academic support, like the Basic Science Laboratories, Central Computing Laboratory, Manufacturing Practice Laboratory and English Language and Communication Skills Laboratory were established for the first year courses. The Phonetics Laboratory, Interactive Communication Laboratory and reading room were set up, much before it was made mandatory by the university, to improve the communication skills of students. Recently, the English Language Laboratory has been upgraded to Multi-Media Laboratory. There are a total of 1415 computer systems in the college with latest configuration. The College main computer center houses 66 latest computer systems and 14 servers. All the systems in the college campus are networked through LAN. Well established intranet, supports the faculty and the administration for online data retrieval of student details, marks, attendance, faculty publications etc.

FACULTY

The college has highly qualified and experienced faculty members including, Adjunct Professors, Professor, Associate Professors.

With a view to strengthen the teaching-learning process and provide quality education the college conducts staff development programs regularly.

The classrooms are well ventilated, spacious and luminous located in architecturally styled buildings amidst lush green lawns which provide a pleasant ambience.

Supporting facilities such as buses for comfortable and safe transport, campus wide EPBAX telephone systems, 24X7 internet connectivity, Generators (625 kVA, 500 kVA, 125 kVA) for uninterrupted power supply, bank and subsidized canteen, are provided to the students and staff. The college has installed roof top solar power plant of 275 kWp capacity.

COMPUTER CENTER

The college has established a high-speed campus-wide network that connects all the computer systems located in the college campus. A fully distributed computing environment based on clusters of workstations and PC's facilitates the staff and students to have ready access to computing resources, services, software and applications. The environment is tailored to the specific teaching/learning needs of each Department. Full access is provided to, the Internet, e-mail, on-line journals, e-content, QEEE facilities, departmental intranet and other online sources of services and information through BSNL leased line Internet connectivity of 200 Mbps, Pioneer Elabs Ltd leased line Internet Connectivity of 250 Mbps and 1Gbps broadband internet connection from ACT Fibernet

The server room houses Windows Server, LINUX Server, Oracle Database Server which are connected to the LAN, thereby providing diverse computing platforms to the students, across the campus. The Internet Gateway comprises a Web Server, Symantec Protection Suite Enterprise 12.1, Fortigate 510B UTM, Fortianalyzer 200C, CISCO Router 2800, CISCO Switch and the other networking components required for an efficient LAN.

FACILITIES

Particulars	Availability
No. of Servers	17
No. of Computers	1415
No. of Learning Resources	NPTEL Courses (192 Web + 212 Video Courses)

SOFTWARE

S.No	Software Description	No.of
1	Turnitin Originality Check - Annual Subscription	1671
2	Microsoft Office 365 A3 for Faculty (Including MS Teams, MS 365Apps)	148
3	Math Works Campus Wide License Agreement Standard Campus + 32 Add on's + Student Licenses + MAOTS (ML Online Training Suite)	Unlimited
4	HiClass SW – Multimedia Educational Network System, 6.0R1	40
5	Symantec Protection Suite Enterprise Edition 14.1 per user renewal essential 36 months acad band	1000
6	Red Hat Linux Enterprise Edition 7.5	01
7	Embarcadero Network Codegear C C++ Builder RAD XE Studio Architect Academic	60
8	IBM SPSS Modeler 17.0 (25 users) (Information Technology Software Service) Assessable Value	25
9	Microsoft®OfficeProfessionalPlus 2016 Sngl Academic OLP 1License NoLevel (100)	100
10	MS Office Professional Plus 2013 –(110)	110
11	Windows Server – Standard 2012 Version R2 – (11)	11

12	SQL Server Enterprise Core 214 Version – (2)	02
13	Windows Server – Device CAL 2012 – (230)	230
14	Visual Studio Professional Edition – 2014 (9)	09
15	IBM Tester	30
16	IBM Rational Quality Manager	
17	IBM Rational SEED Program	30
18	Oracle 11G Standard Edition	30
19	IBM Rational Seed Suit Enterprise Software	30
20	Adobe Acrobat 10.0 Professional	10
24	Oracle 9i Developer, Internet Suite	01
25	NI Communication system design software (NXG 5.0V)	10
26	ADS Software (Keysight make)	01
27	Mentor Graphics Tools HEP-1: IC nanometer Design, HEP-2: Design, Verification and Test.	50
28	Cadence University Bundle Analog & Digital FE & BE Renewal of PG Bundle	10
29	National Instruments Lab view software bundle (Phase-II)	30
30	Code composer studio TMS 20C6748 DSP development hardware boards	60

31	National Instruments Lab view software bundle (Phase-I)	30
32	SOC Development Plat form (ZYNQ-7020) & VIVADO SOC/Embedded System Development Suit	25
35	PSIM	05
36	Mi-power	10
37	PSCADX4	25
38	EMTP	30
39	ETAP	25
40	AutoCAD Civil 3D 2008	10
41	Subscription MAP 3D 2010	11
42	Subscription Civil 3D 2009	10
43	SAP 2000 & ETABS	20
44	Arc GIS Educational Suite (Lab Kit)	30
45	B_EST including upgrades	Un limited
46	E-TABS Educational Suite	20
47	STAAD Pro including upgrades	5
48	Primavera P6	2

49	AUTOCAD 2020	225
50	MSC ADAMS	150
51	LS DYNA	4 CORE
52	SIEMENS Nx Upgrade	30
53	ANSYS Academic Teaching upgrade of ANSYS introduction bundle 18.0	25
54	Hyperwors 11.0 (bundle of 105 Units)	105
55	Ansys turbo tools	5
56	CATIA V5 Academic discovery	30

DR. SARVEPALLI RADHAKRISHNAN
LEARNING RESOURCE CENTRE: CENTRAL LIBRARY

Dr. Sarvepalli Radhakrishnan Learning Resources Centre, the central library has a total built up area of 44,503.36 Sq. ft. It houses **13181** titles and **117535** volumes. The college subscribes online journals, that are made accessible to students. These journals are published by Professional Bodies like Institute of Electrical & Electronics Engineers (IEEE), American Society for Mechanical Engineers (ASME) and American Society for Civil Engineers (ASCE). The College is a member of Delhi Library Network (DELNET). A digital library is provided to the students in 415 sq.ft space.

S.No	Description	No. of Journals
1	IEEE – IEL – E-Journals	205
2	IEEE Proceedings	1435
3	ASME – E-Journals	32
4	ASCE – E-Journals	38
5	ELSEVIER – E-Journals	275
6	J-GATE – E-Journals	17985
7	N-List - E-Journals	6000
8	DELNET – E-Journals	400
9	NDLI Membership (Books & Journals)	One lakh above
10	Knimbus Remote Access	----
11	E-Books	97608

- In the academic year 2001-2002 **"Book Lending Scheme"** of giving one complete set of textbooks to each students for the entire semester, at a nominal rent, has been introduced; and 4 books for UG & 6 books for PG students issue for renewal basis besides the above Scheme.
- **"Knimbus Remote Access"** platform has implemented for access all the e-resources by mobile and desktop remotely.
- College has been recognized as center for conduct of SWAYAM-NPTEL Online Courses.

CO-CURRICULAR & EXTRA – CURRICULAR ACTIVITIES

Vasavi campus has a basket of co-curricular and extra curricular activities. Students' brains are sharpened by conducting various workshops, seminars, quizzes, debates, essay-writing, presentation of technical papers, working model exhibitions etc.

Every year college hosts National Technical Symposium entitled **ACUMEN**. Students from all over the country are invited to the campus to present the best technical papers. The college annual day, **EUPHORIA** is celebrated which showcases the cultural talents of students. To enhance the creative skills, the department of H&SS conducts competitions and activities through **Toastmasters, MuN, Arts, Writers', Film Making, Photography and Dramatics Club**. The College publishes, '**In-touch**', the Alumni Newsletter, and **Technocrats**, the Annual College Magazine. **Reminiscences** provides data about the B.E VIII Semester students.

The Physical Education Department encourages and provides practice to the students to participate in sports & games at Inter Collegiate, Intra-University and National Level Tournaments. The college has facilities for indoor and outdoor games & sports.

NATIONAL SERVICE SCHEME (NSS)

The College has an NSS unit and the student volunteers take up socially useful activities. The unit has organized blood donation camps, service camps to orphanages, tree plantation camps, flood relief camps etc.

CAREER GUIDANCE, TRAINING AND PLACEMENT CELL

Human Resources (HR) Department provides career guidance and counselling for the budding engineers. It prepares students to meet industry requirements in the technical and soft skills domain thus enriching and enabling them to meet the corporate demands.

The department arranges personality development programmes as well as career guidance sessions to help the students explore the various career options in the fields of All India Civil Services, All India Engineering Services, Scientific, Research and Industrial Organizations, Defence Services in addition to arranging counselling sessions on higher education avenues in India and abroad.

THE ENTREPRENEURSHIP CELL (SWAYAM)

Swayam–The Entrepreneurship Cell of the college is established to develop and nourish the latent entrepreneurial spirit inherent in students, and help them to become Entrepreneurs. The vision of the cell is to develop entrepreneurs by creating an ecosystem that encourages and supports the entrepreneurial potential of students. The mission of the cell is to inculcate the spirit of entrepreneurship and to provide the students with the necessary support by mentoring and equipping them with the right skills and attitude to convert an idea into a business venture.

Swayam bagged the championship award given by NEN for the years 2016-17 & 2017-18 for conducting different entrepreneurship activities .

INNOVATION AND ENTREPRENEURSHIP DEVELOPMENT CENTRE (IEDC)

The Government of India recognized that young technocrats are looking for opportunities to exploit their full potential by setting up their own ventures thus becoming “job generators”. As part of this strategy **National Science & Technology Entrepreneurship Development Board (NSTEDB)**, Department of Science & Technology, Government of India, had set up Entrepreneurship Development Cells (EDCs) in educational institutions. The main objective of creating such cells is to *“Develop institutional mechanism to create entrepreneurial culture in academic institutions to foster growth, innovation and entrepreneurship among the faculty and students”*.

SAFETY NORMS & CHECKS

The safety measures and checks are followed in buildings, laboratories and in other critical installations as per the standard norms. The entire campus is equipped with a modern firefighting system. In addition, all the buildings are fitted with fire extinguishers.

EMERGENCY MEDICAL CARE AND FIRST-AID

The college provides first-aid and medical help at the centralized place with trained staff. The health center is equipped with four beds and general medicines. To meet emergency medical attention, college has appointed a doctor and a nurse. A special ambulance has been provided to meet critical medical needs.

TEACHING-LEARNING PROCESS

The members of faculty maintain course files, lesson plan and lesson record to conduct the classes and laboratory courses as per the curriculum requirement. The quality of assignments tests and semester examinations is maintained to meet the program education objectives. The tutorial classes/remedial classes are conducted as per the schedule in the timetable.

Mentoring SYSTEM

To monitor academic progress and holistic development of students ,the **proctor system** (mentoring system) has been introduced in the college.

In this system, each student is assigned a faculty member who acts as a *loco parentis*. Every faculty member is assigned twenty students whom they guide and mentor. The Proctor monitors the progress and welfare throughout the four years of his/her stay in college. Class Coordinators also are allotted for each section who monitor classwork schedule, attendance and discipline issues of every student regularly.

The college has introduced **Professional Practice School** for second year B.E. students so as to acquaint them with the industry needs.

The college has been building purposive partnership with the industry to provide practical learning experience and to expose the students with the emerging trends and contemporary technologies; the College has signed **Memorandum of Understandings (MOUs)** with various corporate houses and industries.

To further improve the skills of the students to face the campus placement interviews, new courses like soft skills and technical skills have been introduced in the curriculum from the second year onwards in the form of *Skill Developemnt*.

ALUMNI

The college has been interacting with the Alumni regularly with a view to providing career guidance and facilitate connectivity with industry through students' visits, projects, placements, consultancy etc. Alumni Meet 'REFLECTIONS' is organized every year. The alumni website is www.vcealumni.org.

VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
ACADEMIC RULES AND REGULATIONS
FOR FOUR YEAR B.E DEGREE PROGRAMME
Under Choice Based Credit System (CBCS) w.e.f A.Y.2022-23)

Academic Regulations VCE-2022-23

On the recommendations of Academic Council and Board of Governors of Vasavi College of Engineering (Autonomous), the following academic regulations will be in force and applicable to all the students admitted into B.E. program of the college with effect from Academic Year 2022-23 onwards. The B.E program is being offered under Choice based Credit System (CBCS). These regulations are called as *Academic Regulations VCE-2022-23*.

The above rules and regulations, specified herein after shall be read as whole for the purpose of interpretation. In case of arising a doubt, the interpretation of the Academic Council, the Statutory Body constituted as per UGC norms of the college is final. The Academic council has the power to make amendments to these regulations whenever necessary and shall be approved by Board of Governors (BoG).

1. DEFINITIONS OF KEY WORDS:

- Academic Year** : Two consecutive (one odd + one even) semesters constitute one academic year.
- Choice Based Credit System (CBCS) Programme** : The CBCS provides choice for students to select from the prescribed courses (core, elective or open or soft skill courses).
- Semester** : An educational programme leading to award of a Degree, diploma or certificate
- Semester** : Each semester will consist of 16-17 weeks of academic work equivalent to 90 actual teaching days. The odd semester may be scheduled from July to November and even semester from January to May.
- Discipline** : Is the branch or specialization of B.E. Degree programme, such as Civil, CSE, CSE (AI & ML), ECE, EEE, IT and Mechanical etc.,

- Course** : Usually referred to, as 'papers' is a component of a programme. All courses need not carry the same weightage. The learning objectives and learning outcomes are defined for each course. A course is designed to comprise lectures/ tutorials/ laboratory work/ field work/ outreach activities/ project work/ vocational training/viva/ seminars/ term papers/ assignments/ presentations / self-study etc. or a combination of some of these.
- Course Flexibility** : Course work of students is made flexible to enable fast, average and slow learners to plan and pace out their study during the Semester as necessary. They can register for more/average/less credits within limits (e.g., +/- 20%) from the prescribed value, based on their learning capacities as observed from CIE, SEE results of the coursework of the previous Semesters.
- Credit Based Semester System (CBSS):** : Under the CBCS, the requirement for awarding a degree or diploma or certificate is prescribed in terms of number of credits to be completed by the students.
- Credit:** : A unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (lecture or tutorial) or two hours of practical work/field work per week.
- Credit Point:** : It is the product of grade point and number of credits for a course.
- Grading** : To be normally done using Letter Grades as qualitative measure of achievement in each Course like: A+ (Outstanding), A (Excellent), B+ (Very Good), B (Good), C (Average), D(Pass), F(Fail) based on the marks (%) scored in (CIE+SEE) of the course and conversion to grade done by relative/absolute grading.
- Grade Point (GP)** : It is a numerical weight allotted to each letter grade on a 10-point scale. A+ =10, A=9, B+=8, B=7, C=6, D=5 and F=0 and student passes a

	course only when he/she gets $GP \geq 04.5$
Semester Grade Point Average (SGPA)	: It is a measure of performance of work done in a semester. It is ratio of total credit points secured by a student in various theory and lab courses offered in each semester and the total course credits taken during that semester. It shall be expressed up to two decimal places.
Cumulative Grade Point Average (CGPA):	: It is a measure of overall cumulative performance, of a student over all semesters. The CGPA is the ratio of total credit points secured by a student in various courses in all semesters and the sum of the total credits of all courses in all the semesters of the program. It is expressed up to two decimal places.
Passing Standards	: Student to be declared successful at the semester-end or programme-end only when student SGPA or CGPA ≥ 4.5, with none of the courses registered in the given semester or for the award of degree remaining with F grade. : A student shall earn the prescribed number of credits recommended by the department concerned for the award of UG/PG Degree. Also, each student must pass in the mandatory courses to qualify for the degree and shall not have any pending disciplinary action.
Credits Required for Award of Degree	: Based on the grades earned, a grade certificate shall be issued to all the registered students after every semester. The grade certificate will display the course details (code, title, credits, grade secured) along with SGPA of that semester and CGPA earned till that semester.
Transcript or Grade Card or Certificate	
Course Load	Every student should register for a set of courses : in each semester, with the total number of credits specified by considering the permissible weekly contact hours.
Course Registration	Every student to formally register in each : Semester for courses (credits) on the advice of the faculty.

Course Evaluation	:	Continuous Internal Evaluation (CIE) in the Semester & Semester End Examination (SEE) constitute the main assessment prescribed for each course. Only those students maintaining a minimum standard in CIE (to be fixed by the institution) will be permitted to appear in SEE of the course.
Continuous Internal Evaluation (CIE)	:	To be normally conducted by the course instructor which includes class tests, homework, problem solving exercises, group discussions, assignments, quizzes, mini-projects & seminars which will be conducted either weekly/fortnightly or during mid-term, anytime throughout the semester, with weightage for the different components being fixed at the institutional level.
Semester End Examination (SEE)	:	To be normally conducted at the institutional level which will cover the entire course syllabi. The syllabi are to be modularized and SEE questions to be set from each unit/module, with choice if any, to be confined to unit/module concerned only. The questions are to be based on knowledge, comprehension, application, analysis, synthesis and evaluation.
Revision of Regulations, Curriculum and Syllabi	:	The institution, from time to time may revise, amend or change the regulations, scheme of examinations, curriculum and syllabi with the approval of the academic council.
College address	:	"Vasavi College of Engineering", (Autonomous), Ibrahimbagh, Hyderabad-500031, Telangana State.
Student	:	Student is a candidate who has taken admission into undergraduate and postgraduate programs of this college, as per the guidelines stipulated from time to time by the Government of Telangana for admissions into various courses of study and the affiliating university, i.e. Osmania University, Hyderabad.

Head of the Institution	:	The Principal is the head of the College
Controller of Examinations	:	Is a constituted body of the college that is responsible for all the examination activities of the autonomous College.

2. ADMISSION PROCEDURE

Admissions are done as per the norms issued from time to time by the Government of Telangana State.

2.1 Undergraduate Admissions

The admissions into undergraduate engineering programs (B.E) for all the branches of study are made as per the norms of State Council of Higher Education (TSCHE), Telangana State Government.

- 2.1**
- a. 70% of seats under Category-A (based on the rank obtained in state level entrance examination-TSEAMCET) will be filled by the Convener, TSEAMCET.
 - b. 30% of seats under Category-B will be filled by the management as per the guidelines issued through Government orders from time to time by the TSSCHE and State Government.

2.2 Spot Admission Procedure for B.E. 4-year Program

Any seats left vacant in the convener quota will be filled based on the guidelines given by Convener, TSEAMCET.

Procedure: The College issues an advertisement after necessary approvals. The spot admissions are made as per the guidelines issued from time to time by convener TSEAMCET.

2.3 Admission to the second year of Four Year B.E (Lateral Entry) Program

Students seeking admission into this category shall qualify in TSECET conducted by the Government of Telangana. Admissions are on the basis of merit ranks obtained by the students.

2.4 Spot Admission Procedure for B.E Lateral Entry

Admission are made based on the guidelines issued by the Convener, TSECET.

Procedure: The college issues an advertisement after necessary approvals. The spot admissions will be made as per the guidelines issued from time to time by the Convener, TSECET.

3. PROGRAMMES OFFERED

At present the college offers seven UG programmes namely Civil, CSE, CSE (AI & ML), ECE, EEE, IT and Mechanical Engineering. A student may be admitted to any one of the programmes of study as per the admission rules. All the programs are offered under semester mode.

4. STRUCTURE OF THE PROGRAMME

4.1 Categorization of Courses

The curriculum of B.E. Programme is designed to have syllabi consisting of theory, laboratory courses and projects that shall be categorized as follows:

Humanities and Social Sciences (H&SS) courses include English language and Communication skills Technical writing and professional presentations, Economics and finance for Engineers and Management and accountancy.

Basic Sciences (BS) courses include Mathematics, Physics, Chemistry, Biology etc.

Engineering Sciences (ES) courses include Materials, Workshop, Basics of Electrical/ Electronics/Mechanical/Computer Science Engineering, Engineering Graphics, Instrumentation, Engineering Mechanics, Instrumentation etc.

Professional Core Subjects (PC) are core courses relevant to the chosen specialization/branch

Professional Elective Subjects (PE) are courses relevant to the chosen specialization/ branch offered as electives.

Open Elective subject (OE) courses from other technical and/or emerging subject areas offered in the College by the Departments of Engineering, Basic Sciences and Humanities.

Mandatory Course: Course work on peripheral subjects offered in a programme, wherein familiarity is considered mandatory. They are non-credit, mandatory courses, wherein a student needs to pass in each if he is to qualify for the award of degree from the concerned institution.

Project Work can be an internship with an industry or elsewhere or projects and seminars.

5. DURATION OF STUDY

- 5.1 The duration of the B.E program is four years. The eight semesters of four-year B.E program are consecutively numbered as I, II, III, IV, V, VI, VII and VIII.

No readmission/admission/promotions/transfers can be made after 4 weeks of the commencement of instruction of semester in I, II, III and IV years. In case there is any court case consequent to which the Convener of Admissions/Principal is compelled to admit a student after the announced last date of admission, then the admission (seat) of such a student will be reserved for the subsequent year on a supernumerary basis.

- 5.2 Internal (Continuous Internal Evaluation: CIE) examinations shall be conducted during the instruction period of the semester.
- 5.3 a) *As per the UGC Guidelines on determination of uniform span period (UGC Letter No. F-12-1/2015 (CPP-II) dated and 15.10.2015 and Osmania University letter No.336/M/Acad.I /2016 dated 21.03.2016) is N+2 students may be allowed to qualify for degree with effect from the Academic Year 2016-17. Where N is the normal or minimum duration prescribed for completion of the programme.*

Hence candidates of four-year degree program, who fail to fulfill all the requirements for the award of the degree as specified herein within ($N+2= 4+2=6$) six academic years from the time of admission, will forfeit their seat and their admission will stand cancelled.

Diploma candidates admitted to the second year under lateral entry scheme shall fulfill all the requirements for the award of the degree as specified hereinafter within ($N+2=3+2=5$) five academic years from the time of admission failing which they will forfeit their seat and their admission will stand cancelled.

Lateral entry students shall also complete the bridge course subjects as required. The scheme and other guidelines will be intimated to the students.

6. REGISTRATION OF COURSES

- 6.1 Every admitted student shall be assigned to a Faculty advisor who shall advise and counsel the student about the details of the academic programme, rules and regulations and the choice of courses considering the students' academic background and career objectives.
- 6.2 Each student on admission shall register for all the courses prescribed in a semester of study including open electives.
- 6.3 Every student shall enrol for the courses of the succeeding semester at the end of the current semester. However, the student shall confirm the enrolment by registering for the courses before the three working days of the commencement of the concerned semester. Online registration of courses including open electives, extracurricular and co-curricular courses will be provided and students should visit the college website for details.
- 6.4 *The registration of the courses (such as professional electives, professional core, open electives etc) by the students in each semester as prescribed by the department concerned shall be completed within the stipulated period and on or before the due date prescribed. Change of professional electives and open electives will not be entertained after the due date.*

- 6.5 No course shall be offered by a Department unless a minimum of 30 students register for that core course and 20 students for elective course. After registering for a course, a student shall attend the classes, to satisfy the academic requirements for attending the semester end examinations.
- 6.6 The enrolment for all the courses of the even Semester will commence 7 working days prior to the last working day of odd Semester. The student shall confirm the enrolment by registering for the courses before the three working days of the commencement of the even semester. However, the student can register for courses for which the student has not enrolled, if these are the courses in which the student has failed. No change of course under any circumstances will be entertained once registration of courses is completed

7 AWARD OF DEGREE

- 7.1 The degree of Bachelor of Engineering will be conferred on a candidate who has pursued the "Regular Course of Study" for four academic years (three academic years for candidates admitted in II-Year under lateral entry scheme), as hereinafter prescribed in the scheme of instruction and has acquired all the credits prescribed in the scheme of examination by the department concerned.

7.2 ATTENDANCE REQUIREMENTS:

- (a) A regular course of study for eligibility to appear Semester End Examinations (SEE) of any semester shall mean putting in attendance of ***not less than 75%*** aggregate in lectures, practical, drawing, workshops, field work, project, seminars, extension etc., in the courses listed in the scheme of instruction. The cumulative monthly attendance in each course and the aggregate attendance will be displayed on the notice board.
- (b) In special cases and for sufficient causes shown, the Principal/Academic Council on the recommendation of the concerned HOD, may condone the deficiency of attendance ***not exceeding 10%*** for ill-health when application made for such a condonation is supported by a valid medical certificate issued by an authorized Medical Officer and approved by the Principal of the college. Medical certificate along with the fitness to be submitted within 3 working days on returning to the class work.

(c) A student can use medical condonation facility only 4 (four) times in the entire period of 8 semesters in the span of 4 years B.E program.

(d) In any semester of the course if a candidate fails to secure the minimum percentage of attendance, he/she shall not be eligible to appear for the SEE of that semester and he/she shall have to enroll himself/herself to undergo afresh a "Regular Course of Study" of the corresponding semester in subsequent academic year by paying required tuition fee, to become eligible to appear for semester end examinations.

7.3 Attendance for N.C.C. Camps or Inter Collegiate or Inter University or Inter State or International matches or debates or Educational excursion or such other Inter University activities as approved by the authorities, involving journeys outside the city in which the college is situated will not be counted as absence. However, such absence should not exceed (4) weeks of the period of instruction, in a semester. Students participating in the above events shall take prior permission from the authorities. Absence not exceeding two weeks, for activities like N.S.S., Inter-University Competitions and debates will be condoned if the candidate is sponsored by the University for such activities. Proof should be provided.

7.4 The attendance shall be calculated from the date of admission into the course.

7.5 The candidates of I semester who were detained can seek readmission without appearing for the Entrance Test during subsequent year, and such admissions shall be treated as supernumerary.

7.6 If a candidate who has pursued a Regular Course of Study of any semester wishes to undergo the same course again, he/she may be permitted to enroll again as a regular student for the course of the semester, whenever it is offered, depending on the availability of seats. Such candidates shall forego the attendance secured for that semester previously. Further the candidate had not pursued a "Regular Course of Study" in any higher semester. For the award of division, however, he/she shall have the benefit of the higher of the aggregate SGPA secured in that semester.

- 7.7 The college working hours will be announced along with the time table and displayed on the department notice boards. To strengthen and augment the academic activities, college will work on extended hours with prior intimation to the students. All the parents are requested to cooperate in this regard.

8. SCHEME OF INSTRUCTION, EXAMINATION AND ASSESSMENT

- 8.1 Instruction in the various courses in each semester shall be provided by the college as per the scheme of instruction & examination and syllabus prescribed for the branch of study approved by the Academic Council and ratified by the BoG.
- 8.2 The students who have taken readmission (joined under the university regulations) due to transfer into the college shall be allowed to pursue their program of study under Autonomous/CBCS regulations of the college. They shall clear all the backlog subjects, if any, in the equivalent subjects as identified by the Board of Studies concerned under the Autonomous/CBCS system for the award of degree. All such students shall register the courses of study as mentioned earlier.
- 8.3 The distribution of marks based on the continuous internal assessment (CIE) assessment and Semester Examination (SEE) for **B.E** program shall be as follows:

Course		Marks	
		CIE	SEE
i)	Each theory course	40	60
ii)	Each practical or drawing course	30	50

- 8.4 There will be continuous and comprehensive evaluation (CIE) of students. The distribution of CIEs and semester examination marks for **B.E program** are given below:

CIE Exams (internals/ Sessional) Theory: 40 Marks

- **30** Marks each for two internal examinations in a semester and **10** marks for assignments (**5**marks) and quizzes (**5** Marks).
- Three quizzes and three assignments will be conducted in a semester each for **5** marks for every course.

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- The internal exam question paper contains part-A, Part-B and Part-C. Internal Exam Duration: 90 minutes. The question Paper consists of
Part-A: Contains 6 Questions of 1 mark each (6 Marks)
Part-B: Contains 3 (or 4) Questions of 4 (or 3) marks each (12 Marks)
Part-C: Contains 2 (or 3) Questions of 6 (or 4) marks each (12 Marks)
 - There is no choice in the question paper. All questions are to be answered.
 - Blooms Taxonomy will be followed in the question Paper Setting.
- Average of two tests** will be considered for calculating internal exams marks to which average assignment/quiz marks will be added for obtaining total CIE marks.

8.5

Lab: 30 Marks

- **18** marks for day-to-day laboratory class work which will be awarded based on the average of assessment for each experiment considering at the end of the course.
- **12** marks for the internal examination.

SEMESTER END EXAMINATIONS (SEE)

- Semester theory examinations will be conducted for 60 marks. A student should secure a minimum of '**D**' grade in each course for a pass. A Student should secure (i) a minimum of 40% marks in end semester exam and (ii) 40% marks in end semester exam and internal exams put together for a pass in each course offered.
- Semester laboratory examinations will be conducted for 50 marks. A student should secure a minimum of '**C**' grade for a pass. (i) a minimum of 50% marks in end semester exam and (ii) 50% marks in end semester exam and internal exams put together for a pass in each laboratory course offered.

The semester end examination question paper consists of Part-A and Part- B. Part -A is compulsory and should cover the entire syllabus and carries 20 marks. A minimum number of 10 questions of Two (2) marks each will be given in Part-A. Part B will comprises of seven (7) questions and it carries 40 marks. A student shall answer any five questions. There shall be one question drawn from each unit of the syllabus and the remaining two questions may be drawn from the total syllabus of all 5 units. However, there should not be more than 2 questions from any unit. Blooms Taxonomy will be followed in the question Paper Setting.

- 8.6 The details of instruction, examination and vacations shall be notified by the Principal.
- 8.7 The semester end examinations prescribed may be conducted by means of written papers, practical's and oral tests, inspection of certified CIE work in drawing and laboratories and workshop or by means of any combination of these methods as may be deemed necessary.
- 8.8 All the general rules for examinations shall be adhered to.
- 8.9 A student who secures '*F*' grade in ***semester exam and sessional put together*** will be declared failed in that semester.
- 8.10 **B.E (Regular)**
The curriculum for any Branch of study of B.E program is designed to have total credits **162** for the award of regular B.E. A student is declared eligible to receive the B.E degree on attaining above credits and other courses/activities prescribed by the department concerned and the college.

9 OPEN ELECTIVE COURSES:

As part of CBCS, open electives are being offered by various departments from III to VI semesters of B.E. program. A total of 11 credits are designated for open electives to be offered under CBCS.

- 9.1 The Engineering ,Physics, Chemistry, Mathematics and H&SS Departments have been offering two credit open elective course during III-Semester and 3–Credit Open Elective Courses during IV,V and VI-Semesters for all B.E Programs from the academic year 2018-19 onwards.

- Allocation of CIE & SEE marks for open elective are given below:

Year of admission	Duration of SEE	Marks	
2022-23		SEE	CIE
2/3 Credit Course:	3 Hrs.	60	40

10. PARTICIPATION OF STUDENTS IN CO-CURRICULAR AND EXTRA-CURRICULAR ACTIVITIES:

The students of B.E. should complete the prescribed credit and mandatory courses offered under HS, BS, ES, PC, PE, OE, MC, and project work by the department concerned. To become eligible for the award of degree, students should also participate in co-curricular (CCA) and extra-curricular (ECA) activities as set by the individual departments by securing 75% of attendance separately in each activity.

10.1 To become eligible for the award of degree, students should also participate in the following activities:

- III Semester : CCA-1 and ECA-1
- IV- Semester : CCA-2 and Technical Skill/ Workshop/ RC/TC etc.
- V- Semester : CCA-3 (PP) and ECA-2 and Technical Skill-1 (prerequisites to additional Technical Skills of VI semester and /or any other technical skills prescribed by the Departments Concerned.
- VI- Semester : Additional Technical Skills
- VI Semester : One Theme-based project with one credit weightage
- One Online Certification Course being offered by NPTEL with a weightage of 2 Credits (which is of 8 weeks' duration and approved by the respective departments) during the period from I and VI-Semesters of B.E programme to become eligible for

award of degree.

- 10.21 The extra-curricular activities are organized under various clubs includes the following clubs, but may not be limited to:

2

S. NO	NAME OF THE CLUBS
1	The Toastmasters Club
2	The MUN Club
3	The Writers' Club
4	The Art Club
5	The Photography Club
6	The Film Making Club
7	The Dramatics Club

The above-mentioned activities come under audit courses with no credits attached. However, attendance to the activities is mandatory to encourage student participation and a student shall secure minimum of 75% attendance in these activities.

11.1 RULES OF PROMOTION FOR B.E	
Semester	Conditions to be fulfilled
I-SEM to II-SEM	Regular course of study of I-SEM and 40% aggregate CIE marks in I-SEM
II-SEM to III SEM	a. Regular course of study of II SEM and
	b. 40% aggregate CIE marks in II- SEM
	c. Must have secured at least 50% of total credits prescribed for I and II SEMs together
III-SEM to IV-SEM	a. Regular course of study of III-SEM and
	b. 40% aggregate CIE marks in III- SEM
IV-SEM to V- SEM	a. Regular course of study of IV SEM
	b. 40% aggregate CIE marks in IV- SEM

	c. Passed in all the courses of I and II SEMs
	d. Must have secured at least 50% of total credits prescribed for III and IV SEMs put together
V-SEM to VI-SEM	(a) Regular course of study V-SEM (b) 40% aggregate CIE marks in V-SEM
VI-SEM to VII-SEM	a. Regular course of study of VI-SEM
	b. 40% aggregate CIE marks in VI- SEM
	c. Passed in all the courses of III and IV SEMs.
	d. Must have secured at least 50% of total credits prescribed for V and VI SEMs put together
VII-SEM to VIII-SEM	(a) Regular course of study of VII-SEM (b) 40% aggregate CIE marks in VII-SEM
Eligibility to appear VIII-SEM exams	Regular course of study of VIII-SEM and 40% aggregate CIE marks in VIII-SEM
11.2 Promotion rules for B.E (3 YDC) course (Lateral Entry)	

Semester/Class	Conditions to be fulfilled
III-SEM to IV-SEM	Regular course of study of III-SEM and
	40% aggregate CIE marks in III-SEM
IV-SEM to V-SEM	Regular course of study of IV SEM
	40% aggregate CIE marks in IV-SEM
	Must have secured at least 50% of total credits prescribed for III and IV SEMs put together
V-SEM to VI-SEM	Regular course of study V-SEM 40% aggregate CIE marks in V-SEM
VI-SEM to VII-SEM	Regular course of study of VI SEM
	40% aggregate CIE marks in VI-SEM
	Passed in all the courses of III and IV SEMs
	Must have secured at least 50% of total credits prescribed for V and VI SEMs put

	together
VII-SEM to VIII-SEM	Regular course of study of VII SEM 40% aggregate CIE marks in VII SEM
Eligibility to appear VIII-SEM exams	Regular course of study of VIII SEM and 40% aggregate CIE marks in VIII-SEM

12. CREDITS AND GRADES:

- 12.1 Credit system will be implemented in each semester. The credit hours for each theory course, laboratory sessions, Skill Development courses and project work are clearly mentioned in the scheme of instruction.
- 12.2 Absolute/Relative grading system is adopted in awarding the letter grades. The marks are converted to grades based on pre-determined class interval. As per the UGC recommendations a 10-point grading system with the following letter grades are used:

Academic Performance(%)	Letter Grade		Grade Points
90 to 100	A+	Outstanding	10
80 to 89.99	A	Excellent	09
70 to 79.99	B+	Very Good	08
60 to 69.99	B	Good	07
50 to 59.99	C	Average	06
40 to 49.99	D	Pass	05
Below 40 (Theory).	F	Fail	0
Below 50(Laboratory)	F	Fail	0
	Ab	Absent	Ab

- 12.3 A Relative grading system will be implemented for computing semester grade point average (SGPA) and Cumulative grade point average (CGPA). The college will follow relative grading with flexibility given of ranges for grades.
- 12.4 For non-credit courses letter grade secured will not be considered while computation of SGPA/CGPA. No SGPA/CGPA is declared, if a candidate is failed in any one of the courses of a given semester.

12.5 GRADES: THEORY AND LABORATORY COURSES

The final grades in a semester will be computed based on aggregate marks of CIE and SEE in a course put together. A student who earns a minimum of 5 grade points and above in a theory course and 6 grade points in a laboratory is declared to have successfully completed the course.

- 12.6 The Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA) shall be computed considering the credits and grades secured by a student in CIE and semester examinations marks put together.

12.7 COMPUTATION OF SGPA AND CGPA

- A. The **SGPA** is the ratio of sum of the product of the number of credits and the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student in a semester i.e.

$$\text{SGPA} (S_i) = \Sigma(C_i \times G_i) / \Sigma C_i$$

where C_i is the number of credits of the i^{th} course and G_i is the grade point scored by the student in the i^{th} course.

- B. The **CGPA** is calculated in the same manner considering all the courses undergone by a student over all the semesters of a programme, i.e.

$$\text{CGPA} = \Sigma(C_i \times S_i) / \Sigma C_i$$

where S_i is the SGPA of the i^{th} semester and C_i is the total number of credits in that semester.

- C. The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

12.8 CONVERSION OF GRADES INTO PERCENTAGE

Conversion formula for the conversion of GPA into indicative percentage is

$[\text{CGPA Earned} - 0.50] \times 10 = \% \text{ of marks scored.}$

Illustration: $[\text{CGPA Earned } 7.5 - 0.50] \times 10 = 70.0\%$

13. INDUSTRIAL TRAINING/INTERNSHIP

The students may undergo Industrial Training for a period as specified in the curriculum during summer / winter vacation. The number of credits shall be assigned as detailed below. The students may undergo internship at research organization / university/ industry for the period prescribed in the curriculum. In such cases, Industrial Training / Internship needs to be undergone continuously from one organization only. The student can undergo maximum of 3 months during the entire duration of study.

14. B.E. Honors Regulations

Honours is an additional credential a student may earn if she/he opts for the extra 18-20 credits needed for this in her/his own discipline. Honours is not indicative of "Class". She/He accumulates the extra credits by registering and completing the required courses. On successful accumulation of credits at the end of the programme, this will be mentioned in the Degree Certificate as "Bachelor of Engineering (XXX) with Honours". The fact will also be reflected in the transcript, along with the list of the courses taken. For the award of Honours to B.E. students, all requirements towards the basic degree and the honours have to be completed within the stipulated period of the programme for which they are admitted. Vasavi College of Engineering is offering BE (Hons) in the Departments of Electronics and Communication Engineering, Information Technology and Mechanical Engineering to be implemented for the students to be admitted from the academic year 2020-21.

Eligibility Criteria:

- ❖ Any student admitted to BE regular programme can opt for BE (Honours) programme at the end of the IV semester. The student should have a CGPA of 7.5 and above and should have cleared all the courses as prescribed in the curriculum in the first attempt.
- ❖ Batch Size : Minimum of 20 and Maximum of 40 students per Programme.
- ❖ He/She should complete the mandatory requirement of completing ONE NPTEL Certification Course (as per BE regular programme regulations) by the end of IV Semester of their study.

Academic Requirements:

- ❖ In addition to the BE regular programme course structure as specified, the BE (Honours) students must register & complete additional courses as prescribed by the respective Department with a minimum of 18 and a maximum of 20 credits during V to VIII semesters of their study.

Scheme of the additional courses:

Category	Type of Course	Mode of Delivery	Credits
1	Theory and Lab courses	Class Room – based	10
2	Theory Courses	Classroom-based/ MOOCS	02 to 04
3	Theory Courses	MOOCs	03
4	Minor Project	-----	03
		Total	18 to 20

❖ Students who have opted for BE (Honours) programme will be exempted from the ECA-2 Course at V semester (which is the part of regular BE curriculum and does not carry any credits).

Eligibility for the award of BE (Honours) degree:

A student who has opted for BE (Honours) should earn additional credits of minimum 18 and maximum of 20 by completing additional courses as prescribed upto VIII semester and should secure a CGPA of 7.5 by the end of VIII Semester to become eligible for the award of BE (Honours) Degree.

Option to drop out from BE (Honours) Programme:

Based on exigency, students will be permitted to exit from BE (Honour) Program after VI semester and re-join their BE-regular programme. However, in such a case, the students should complete the exempted ECA-2 course during VII Semester of their study

15. AWARD OF DEGREE/DIVISION

To obtain degree, the student shall have passed in all the courses and secured the number of credits as prescribed in the course structure of program offered by department concerned and should obtain a CGPA of at least 4.5 and shall not have any disciplinary actions pending against him/her. The award of division secured in the degree on 10-point scale is given below:

CGPA SCORE	DIVISION AWARDED
7.50 and above (10.00-7.50)	First Division with distinction
6.50 and below 7.50	First Division
5.50 and below 6.50	Second Division
4.50 and below 5.50	Pass division
Below 4.50	Fail

16. GENERAL RULES OF EXAMINATION

- 16.1 All examinations shall be held at such places as may be decided and at such other centers on such dates as may be notified.
- 16.2 Application for permission to appear at every examination shall be made on the prescribed form accompanied by three passport size full face photographs (not profile) which along with the necessary certificates regarding attendance, practical work, etc., and the prescribed fee, should be sent to the Controller of Examinations on or before the date fixed for this purpose.
- 16.3 When a candidate's application is found in order and he/she is eligible to appear for the examination, the Controller of Examinations, shall furnish the candidate with a Hall -Ticket affixing the photographs on it to enable the candidate to appear for the examination. Candidates shall have to produce Hall-Ticket for admission into the premises where the examination is being held or to a part of the said premises as well as to the Examination Hall.
- 16.4 A candidate who fails to attend the examination for any reason whatsoever under any circumstances shall not be entitled to claim refund of the whole or any part of the examination fee nor adjust it for subsequent examinations.
- 16.5 A candidate after declared successful in the whole examination, shall be given a certificate indicating the year of examination, the courses in which he/she was examined and the division in which he/she was placed.
- 16.6 No candidate shall be allowed to appear at examinations for different degrees and different faculties simultaneously.

- 16.7 Students, who have appeared once at any examination of the course, need not put in fresh attendance, if they want to reappear at the corresponding examination, notwithstanding the fact that new courses may have been introduced by the college. They will however, should appear at the examinations according to the scheme of examination and syllabus in force.

17. ADVANCE SUPPLEMENTARY AND MAKE-UP EXAMINATIONS

- 17.1 To decrease the backlog load on the students who failed to clear one or more courses in the even semester and to give equal chances for appearing examinations in odd and even semesters, Advance Supplementary examinations for even semester (II, IV and VI) will be conducted immediately after declaring the results of even semester by giving proper time for preparation.
- 17.2 Since the supplementary examinations of even semesters which are being held during the months of November/December are being advanced to June/July months, supplementary examinations for the even semesters henceforth will not be conducted.
- 17.3 If the candidate is declared to have passed in the revaluation of the main examination, then the result of Advanced Supplementary examinations shall not be considered even if the student appeared for the said exam.
- 17.3 Make- Up examinations will be conducted for the students having backlog courses at VIII semesters of 4th year B.E immediately after release of regular examinations results of VIII semester.

18. IMPROVEMENT OF DIVISION

- 18.1 A candidate who wishes to improve his/her division may do so within one academic year immediately after having passed all the examinations of BE Degree Program by reappearing at not more than two semesters (All courses pertaining to the semester taken together) examinations. For the award of the division, he/she will have the benefit of the higher SGPA secured in the corresponding semesters.
- 18.2 In case of candidates who have secured CGPA less than 4.5 of total aggregate of all eight semesters needed for a pass division, the candidate can appear for improvement in individual courses to become eligible for a PASS Division within one academic year in any two semesters.

19. TRANSITORY REGULATIONS

Whenever, course or scheme of instruction is changed in a particular year, two more examinations immediately following thereafter, shall be conducted according to the old syllabi/regulations. Candidates not appearing at the examinations or failed shall take the examination subsequently according to the revised syllabi/regulations.

20. SCHEDULE ON THE NATURE OF MALPRACTICE AND AWARD OF PUNISHMENT

S.No	TYPE OF MALPRACTICE	PUNISHMENT TO BE AWARDED
1	Possession of the prohibited (written or printed) papers, books, notes during the examination period but which were not used.	Shall be debarred from appearing at the subsequent papers of the examination apart from cancelling the result of the examination (" Examination ") in this context refers to all the papers taken by the candidate on the same Hall Ticket) in which he/she had indulged in malpractice.
2	Matter relevant to the examination being written on any part of the body or on the clothes worn, or in the instruments, wrappings, etc.	
3	Attempting to take help from any prohibited papers, notes, written or printed matter, writings on the walls, furniture, mobile phones / electronic gadgets and attempting to take help from or giving help to other regarding answer to any question or questions of the examination paper.	
4	Taking help from mobile phones / electronic gadgets or consulting of prohibited written or printed material; consulting and / or taking help from or helping other examinee during the examination period inside the examination hall or outside it with or without their consent, or helping other candidate to receive help from anyone else.	

5	An examinee who attempts to disclose his/her identity to the paper valuer by writing his/her Hall Ticket Number at a place other than the place prescribed for it, or by writing his/her name or any coded message or an examinee who makes an appeal to the paper valuer in the answer book.	Cancelling the result of that paper.
6	Using abusive and obscene language in the answer book.	
7	Refusing to obey instructions of the Chief Superintendent/ Invigilator.	
8	Writing on the question paper or other papers the answer to questions, rough work etc., with no intention of passing it on to another examinee.	To be warned not to do so.
9	Examinee swallowing or destroying prohibited material found in his/her possession or acting in any other manner with a view to destroy evidence.	Cancellation of the result of all examinations taken or proposed to be taken during that session and prohibiting his/her admission into or continuation in any course of the Institution for a period of one year.
10	Smuggling an answer book / additional answer book / matter into or out of the examination hall.	Cancellation of the result of all examinations taken or proposed to be taken during that session and prohibiting his/her admission into or continuation in any course of the Institution for a period of one year.
11	Inserting in or removing from the answer book / additional answer book of any sheet.	
12	Substituting wholly or partly an answer book / additional answer book.	
13	Cases of examinees when conspiring to interchange their Hall Ticket Numbers.	

14	Creation of disturbance or otherwise misbehaving in and around the examination hall during or before the examination.	Cancelling the results of all examinations taken or proposed to be taken during that session and prohibiting admission into or continuation in any course of study for a period of two years.
15	Guilty of assaulting / abusing, intimidating any person connected with the examination work any time-before, during or after the examination.	Cancelling the results of all examinations taken or proposed to be taken during that session and the next session and prohibiting admission into or continuation in any course for a period of two years.
16	Impersonation even at a single examination.	a) The case of impersonation to be dealt with as per law in respect of the candidate who has impersonated (Imposter) and the candidate who is impersonated (original candidate). b) The candidate who has impersonated (Imposter) shall be expelled from examination hall. He/She(Imposter) is also debarred and forfeits the seat. c) The performance of the original candidate shall be cancelled in all the examinations (including Practicals / Project work) if any appeared by him/her and shall not be allowed to write remaining subjects of that semester. He/She shall also forfeit the result(s) of other semester(s) registered along with the examination in which the offence was committed. d) The original candidate be debarred from two consecutive semesters from class work and all examinations conducted by

		the Institution. e) Continuation of the course by the original candidate shall be subject to the academic regulations in connection with forfeiture of seat. f) In case if the original candidate would like to discontinue the course immediately after the punishment is awarded, he/she shall be permitted to discontinue only after the completion of punishment period.
17	Any other malpractice not defined above.	As advised by the committee constituted to look into the cases of malpractices.

NOTE: *"EXAMINATION"* in this context refers to all the papers taken by the candidate on the same Hall Ticket.

AWARDS AND REWARDS

GOLD MEDALS

Vasavi Academy of Education has instituted Gold Medals for the toppers of each branch based on their cumulative performance in the University Examinations from 1st year to final year. Gold Medals have also been instituted by the industry partners, alumni, parents and individuals.

The members of Vasavi Academy, Alumnus of VCE, and reputed software organizations have instituted sixteen gold medals, in various branches of study for the best outgoing students (toppers) based on their performance in the Osmania university examinations.

S. No.	NAME OF THE GOLD MEDAL	CRITERIA
1	Sri.Pendekanti Venkata Subbaiah Memorial Gold Medal for the best student.	Best student amongst of all branches passing out and who got highest CGPA.
2	Smt.Kanakamma Venkata Subbaiah Gold Medal for Best girl Student.	Best girl student amongst of all branches passing out and who got highest CGPA.
3	Dr.K.V.Subba Rao Gold Medal	Best student amongst all branches passing out and who got highest CGPA
4	Prof. G.Lakshmi Narayana Gold Medal- Civil Engg.	The student who got highest CGPA amongst the Civil Eng. Students.
5	Sri. G.Narayana Chetty, IAS (Retd) Gold Medal.	The student who got highest CGPA among the Mechanical Engg. Students.
6	Sri.K.R.Krishnaiah Chetty Memorial Gold Medal	The student who got highest CGPA amongst the ECE students.
7	Sri.K.R.Gupta Memorial Gold Medal	The student who got the highest CGPA amongst the CSE students.
8	Dr.T.B.G.Tilak Memorial Gold Medal	The student who got highest CGPA amongst the EEE students.
9	Sri.Sikakollu Subba Rao Memorial Gold Medal.	The Student who got highest CGPA amongst the I.T students.

10	Sri. A.R.Ravi Kiran Memorial Gold Medal.	The student who got highest CGPA among the Mechanical Engg. Students.
11	"Sri.A.Venkata Ramana Memorial" Gold Medal	The student who got the highest CGPA amongst the M.E (ES&VLSID) students
12	"Smt. & Sri.Eskala Pedda Ratnaiah Memorial" Gold medal	The student who got the highest CGPA amongst the M.E (AD & M) students
13	Prof.K.Venkataramaiah Memorial Gold Medal.	The student who got highest CGPA amongst the M.Tech - CSE students.
14	Sri. D.Changal Raju Memorial Gold Medal.	The student who got highest CGPA amongst the M.E (CE & SP) Students.
15	Sri. Mohammed Mujeebuddin Memorial Gold Medal.	The student who got highest CGPA amongst the M.E (PS & PE) Students.

YOUNG LEADER AWARD

In memory of Mr. Harshavardhan Podipi Reddy, an ex-student of Mechanical (Production) Engineering, an 'Award for Young Leader' has been instituted by his parents, with a cash prize. This prestigious award, is presented to one deserving student from every branch of engineering, in their final year.

The students are given an opportunity to apply for the award based on their achievement in 5 major areas viz.,-marks secured, attendance secured, participation in co-curricular and extracurricular activities, leadership initiatives. After evaluating the applications received and based on the outstanding contributions made by the applicants, the students are selected for the award.

MERIT AWARDS

Best Academic, Projects and attendance Awards:

Since 2001 our college is awarding Best Academic awards to the toppers of all sections based on the CGPA obtained by them in the preceding semesters, Best Project awards to the outgoing students, Best Attendance awards based on the preceding year regularity and

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Best Project award based on the quality of work. It instills a spirit of healthy competition among the students with a passion to excel in their chosen fields of specialization.

The Best Academic prize details (for all UG and PG students) :

Sl No.	Name of the Prize	Prize Amount Rs.
1	First Prize	4000.00
2	Second Prize	2500.00
3	Third Prize	1500.00

BEST PROJECT AWARDS

Innovative, creative and research oriented projects are awarded suitably. These awards are given to the final year students. To encourage the students to carry out such projects in each branch, the management has decided to give the first and second best project prizes. The best project and second best project receive a cash prize.

The Best Project prize details:

Sl No.	Name of the Prize	Prize Amount Rs.
1	<u>First best Project Prize</u> (Should be equally shared among the students of that project group in each branch)	10,000.00-
2	<u>Second Best Project Prize</u> (Should be equally shared among the students of the project group in each branch)	6,000.00

BEST ATTENDANCE AWARDS

In order to encourage the regularity among the students, the best percentage attendance awards are given to those securing 100%, 99% and 98% attendance. They are given cash awards.

The Best Attendance prize details: (For Senior UG)

Sl No.	Name of the Prize	Prize Amount Rs.
1	100% attendance	2,500.00
2	99% attendance	1,500.00
3	98% attendance	1,000.00

The Best Performance prize of I semester BE:

Sl No.	Name of the Prize	Prize Amount Rs.
1	Best Attendance Upto end of I Semester	
	100%	1,000.00
	99%	750.00
	98%	500.00
2	Best performance in I year I Sem- Internals Marks	
	First Best	1,000.00
	Second Best	750.00
	Third Best	500.00

Incentive on completion of NPTEL/MOOCs certification course:

- a) 100% exam fee reimbursement for those who have passed and secured elite plus gold and second top 2% position in registered candidates in that course and one time incentive of Rs.2,000.
- b) 75% examination fee reimbursement for those who have passed and secured elite plus Gold of the registered candidates in that course and one time incentive of Rs.1,000.

For securing notable all India GATE Rank:

- a) Rs.25,000 cash award to the students who have secured below 100 All India Rank
- b) Rs.10,000 cash award to the students who have secured All India Rank from 101 to 500.

REWARDS

Cognizant Technology Solutions has instituted an award for the best outgoing student.

REIMBURSEMENT OF CONFERENCE REGISTRATION FEE

Registration fee will be reimbursed to the students presenting technical papers in the technical events conducted by reputed institutions. Further, an amount of Rs.5000/- to Rs.10,000/- will be awarded to the team of students who have presented papers and won First / second prize in conferences/seminars conducted by reputed institutes like IITs, IIITs, NITs, BITs-Pilani/Hyderabad.

Participation in national competitions :

An amount of Rs.20,000/- to Rs.50,000/- will be awarded to the team of students who win first second prizes in National Level competitions (Hackathons like Google/ Microsoft/CTs, SAE- Baja, SAE-Supra, ASME-HPVC, Ultratech etc.) conducted by Academia/Industry.

Sports & Games:

An amount of Rs.10,000/- to Rs.20,000/- will be awarded to the student / team of students who win first / second prizes in National Level competitions conducted by Government / Universities.

MERIT-CUM-MEANS SCHOLARSHIPS

The Management of Vasavi College of Engineering provides Merit-cum-Means Scholarships to the needy students.

FINANCIAL ASSISTANCE

Financial assistance to the economically poor students is available on the basis of merit-cum means. The circulars are issued from time to time inviting the applications in every academic year.

Guidelines for Financial Assistance

1. Students who are economically weak are considered for financial assistance.
2. The financial assistance is provided to the eligible students with a condition that the assistance received shall be paid back after getting employment in equal installments over a period of two years. The amount received is credited to a separate fund (financial assistance fund) in the college which is utilized for assistance given to subsequent batches of students. This account is operated for any contribution received from the staff and any other philanthropists for this good cause.
3. The needy students are identified by the "Department Financial Assistance Committee" that comprises the respective HODS, one senior faculty and two students from each branch. The short listed eligible students get the financial assistance.

TRANSPORT FACILITIES- GENERAL MODE

All the students are eligible for the General Bus Pass. The TSRTC buses 120S, 120N, 220J, 220V ply from Mehdiapatnam 'X' roads to the college. For fresh bus passes, students should apply during 21st to 29th of every month and for renewal during 13th to 17th of every month at all APSRTC Bus Pass Centres and e-Seva Centres.

FIRST YEAR STUDENTS - HIRED BUS TRANSPORT

The Private buses are under hire exclusively for I year B.E students of the college. More buses can be arranged in other routes, if the strength of the students in that particular route is 60. Presently the buses are operating to the college from various place of the Hyderabad-Secuderabad twin cities. The buses start at their respective destinations at 8.00 am. in the morning and leaves the college in the evening at 4.40 pm. details of the routes are given below:

**Details of the routes of the 1st year student Exclusive
College Buses 2022-23**

B.E. 1st year Transport for the year 2022-23

S.No.	Route/s of the buses
1	ECIL 'x' Roads – VCE Via: A.S.Rao Nagar, Naredmet 'x' Roads, Vinayak Nagar, Anandbagh, Malkajigiri, Mettiguda, Rail Nilayam, Sangeeth 'x' Roads, Chilkalguda 'x' Roads, Kawadiguda, Lower Tankbund, Lakadikapool, Mehdiapatnam, VCE.
2	Vanasthalipuram Red Tank - VCE Via: Panama, L.B. Nagar, Kothapet, Chaitanyapuri, Dilsukhnagar, Malakpet, Chaderghat, Moinza Market, Abids, Nampally, Public Gardens, Lakadikapool, VCE.
3	Uppal Depot. to VCE Via: Uppal 'x' Roads, Survey of India, Habsiguda, Taranaka, Adikmet, Vidyanagar, Shankermutt, Nallakunta Fever Hospital, Narayanguda, Himayathnagar, Liberty, Lakdikapool, VCE
4	K.P.H.B - VCE Via: Vivekananda Nagar Colony, Kukatpally, Moosapet 'x' Roads, Erragadda, ESI, S.R.Nagar, Ameerpet, Punjagutta, Nagarjuna Circle, Banjara Hills, Masab Tank, NMDC, Mehdiapatnam, VCE.
5	BHEERAMGUDA - VCE Via: Ashok Nagar, Lingampally 'x' Roads, Chandanagar, Gangaram, Alwyn 'x' Roads, Miyapur 'x' Roads, Hafeezpet, Kondapur, Kothaguda 'x' Roads, Gachibowli, Outer Ring Road, Narsingi, VCE.
6	MIYAPUR - VCE Via: Nizampet 'x' Roads, JNTU, Malasyan Town Ship, Hitech City, Mind space, Gachibowli, Outer Ring Road, Narsingi, VCE.
7	ALWAL (Indira Gandhi Statue) – VCE Via: Lothukunta, Tirumalgiri, Kharkhana, JBS, Paradise, Begumpet, Punjagutta, NIMS, Nagarjuna Circle, Banjara Hills, Masab Tank, NMDC, Mehdiapatnam, Pillar No.68, VCE
8	Vanasthalipuram Rythu Bazar – VCE Via: NGO'S Colony, B.N. Reddy Nagar, Hasthinapuram, Sagar Ring Road, Karmanghat, Chempapet, Santhoshnagar, Owaisi Hospital, Midhani 'x' Roads, Chandrayangutta, Attapur, VCE
9	Nagole 'x' Roads to VCE Via: Uppal 'x' Roads, Ramanthapur HPS, Amberpet 'x' Roads, 6 No., Shivam Road, Vidyanagar 'x' Roads, VST, RTC 'x' Roads, Ashok Nagar, Indira Park, Telugutalli Flyover, Lakdikapool, Masab Tank, NMDC, Mehdiapatnam, VCE

RULES OF CONDUCT TO STUDENTS

1. The college premises and buildings shall be kept clean; writing and sticking posters and notices on the building walls is strictly prohibited.
2. Students are not permitted to resort to strikes and demonstrations within the college. Participation in any such activity shall automatically result in their dismissal from the college.
3. No student unions, except professional associations, are permitted in the college.
4. Any student responsible for bringing outsiders into the college campus for settling student disputes will be expelled from the college.
5. The students may go on Industrial Tours on their own expense. The college will not defray any expenses of the tour.
6. Smoking, consumption of alcoholic drinks, gambling of any kind is prohibited in the college premises. Any student found in the college premises in an intoxicated condition at any time will be summarily expelled from the college without any enquiry.
7. The students are expected to be regular in their class work and should conduct themselves in a disciplined manner. They should abide by such rules of discipline and conduct as stipulated by the college from time to time.
8. Fees must be paid in one instalment within two weeks of 1st Semester in the College. Fine at Rs.20/- per day will be levied for delayed payment upto 2 weeks, after which name will be deleted from rolls. Later Readmission fee will be Rs.500/- in addition to fine dues. Fee once paid will not be returned under any circumstances. Non payment of fees will result in forfeiture of his/her seat in the college.
9. The principal of the college is the final authority as regards the discipline in the institution and has full powers to suspend, fine, rusticate and take any other action, which is deemed necessary.
10. The conduct of the students should be exemplary, not only within the premises of the college but also outside.
11. The students are informed that they should furnish the latest addresses of their parents/guardians in the Principal's Office. Any change of address of the parents/guardian should also be informed immediately, in the college office.

12. Ragging is prohibited. Any student participating in ragging is liable to be summarily expelled from the college without any enquiry. Ragging on campus and off campus is strictly prohibited and it is a cognizable offence. The college has constituted Anti-Ragging Committee, vigilance teams, anti-ragging squads involving the police officers, senior faculty, etc., as per the Act.

DEPARTMENT PROFILES

DEPARTMENT OF CIVIL ENGINEERING

The Civil Engineering Department was established in the year 1981 and has been in existence right from the inception of the college. It offers B.E. Civil Engineering course with an annual intake of 60 students.

MISSION

To impart knowledge in the latest technologies to the students of civil engineering to fulfil the growing needs of the society."

Department has been conferred with Autonomous Status by the University Grants Commission (UGC) and Osmania University, Hyderabad for a period of six years with effect from the Academic Year 2014-15. The

Department has been accredited by NBA three times and has accreditation till June 2024. Choice Based Credit system (CBCS) is introduced to the Students in academic year 2016-17. AICTE Model Curriculum was introduced in the year 2018-19. Student enrollment is 100% and success rate is 100% for past two years.

Besides high-quality teaching, the Department is actively involved in material testing and consultancy works. The department has 14 highly qualified and experienced faculty members consisting of Professors, Associate Professors and Assistant Professors with an average experience of 15 years and 10 technical and supporting staff with an average experience of 20 years. Department has two well experienced adjunct faculty from the industry who bring in their industrial exposure to the students.

Faculty members of the department adopt innovative teaching practices and methods of modern pedagogy for effective teaching learning process. Faculty members are specialized in offering consultancy in the areas of concrete material testing, structural analysis, transportation engineering, water resources engineering and geo-technical Engineering. Total revenue generated from consultancy is Rs 30.00 lakhs in the last five years.

The Department has 10 full-fledged laboratories including a Centre for Geomatics and a project laboratory. The Department also has in its gamut an exclusive computing facility with the latest software in Design, Planning and Management, Remote Sensing, GIS, Land and Water Management, etc.

The undergraduate curriculum comprises of the following: Humanities, Basic and Engineering Sciences, Mathematical, Professional Core and Electives Courses, Open Elective and Skills Development Courses. Apart from the curriculum, students have Co-curricular and Extra-curricular club activities for imparting interpersonal, teamwork / multitasking skills to the students.

Open elective courses were introduced to widen their horizons of knowledge and to enable students to work on multidisciplinary projects. NPTEL/MOOCs course helps students to improve their self-learning and knowledge and made mandatory for the award of degree.

A good relationship with industry is maintained for the student training, student internships & projects, industrial visits, expert lectures. Every year third semester students will undergo practical training in professional practice school with the various industries. In addition, regular Industrial visits are organized. Students take up internship with the industry from second year. Final year students take up projects in the industry.

The department encourages students to actively participate in extension and outreach activities under NSS unit which includes Swatch Bharat Campaign, Voter registration, Street Cause, Blood Donation Camps, Tree plantation etc.

The institute follows a Proctorial system in which around twenty students are assigned to each faculty. Besides this, personal counselling is given to students through a qualified professional Student Counsellor. The consistent academic and other support rendered, has resulted in increased net selections in placements and gradual improvement in average pay package. Performance in competitive exams have also increased resulting in admissions into Higher Educational Institutions both in India and Abroad.

The department has organised two international conferences and several national conferences. The department has a vibrant Research environment with linkages to Government R&D Institutes, Industry and Consultancy agencies. The Department was awarded 2 Research Projects worth Rs.5.16 lakhs lakhs by Government Agencies during the past five years. MODROBS sanctioned project worth Rs 14 lakhs has been completed. The Department has 3 functional Memoranda of Understanding's (MoU's).

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

The Department of Computer Science & Engineering was started in the year 1994 offering, 2 UG programs- BE(CSE) with an annual intake of 180 students and BE CSE (AI & ML) with an annual intake of 60 students. M.Tech course was started in the year 2011 with an annual intake of 18 students.

MISSION

To enable students to develop logic and problem-solving approach that will help build their careers in the innovative field of computing and provide creative solutions for the benefit of society.

FACULTY

Dr. T. Adilakshmi, Professor and Head of the Department, has 36 years of teaching experience. The department has 27 well-qualified, experienced faculty members and 3 adjunct/Visiting faculty. Osmania University has recognized the department as a Research Center and two professors are recognized as Research Supervisors. The faculty members have varied academic interests and some of their specialized fields include Data Mining, Artificial Intelligence, Grid Computing, Image Processing, Cloud Computing, etc. The department has been associated with eminent industries to carry out research/consultancy work.

INFRASTRUCTURE

The department has a carpet area of 1585 Sq.mtrs. to accommodate the needs of classrooms, laboratories and other common facilities. The laboratories are well equipped with the latest configuration Computers.

There are six UG, one PG and one Research and Project lab consisting of a total of 365 number of computers. The Department has received a grant from AICTE under MODROBS and established a lab for Industrial Internet of Things (IIoT).

The various servers in the server room include Oracle 11g Database Server, Intranet Server (TOMCAT), Oracle 11g Database Automation Server, NPTEL Video/Web Server, Mat Lab Server 2011 R2, Proxy Server,

Red Hat Linux 5.0 Server, Library Automation Server, Symantec Protection Enterprise Edition 3.02, Rational Rose Server, Informatica Server. They are all connected to the LAN thereby providing diverse computing platforms to the students across the campus. The college has Internet facility with two leased lines and one broadband, one from BSNL with 200 Mbps, one from Pioneer eLabs with 250 Mbps and ACT Fiber with 1Gbps Broadband. To facilitate research, the department also has:

1. Aneka.NET Cloud computing software version 3.0 enterprise edition site user license.
2. MATLAB Perpetual concurrent license academic version

INDUSTRY INSTITUTE INTERACTION

The College has signed MoUs with prominent IT-related organizations: Pega Systems, Infosys, Navaratan Technologies, Coding Ninja, CCC Digital India Pvt. Limited, Chidhagni Consulting Pvt. Limited, and IBC Media. These partnerships help the students meet the highly competitive standards of the industry by keeping them abreast with the latest advances in technology through training programmes, student internship and projects, lectures by professionals/experts from the industry.

VALUE ADDED COURSES

CISCO Local Academy enables students to meet the contemporary market demands of Computer Networks.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Established in 1981, the department offers 4-year B.E. Degree Programme in Electronics & Communication Engineering, with an annual intake of 180 students. The department also offers 2-year M.E. Programmes, one with specialization Embedded Systems & VLSI Design and other with specialization Communication Engineering & Signal Processing.

MISSION

"To inculcate a spirit of scientific temper and analytical thinking and train the students in contemporary technologies in Electronics & Communication Engineering to meet the needs of the industry."

FACULTY

Dr. E. Sreenivasa Rao, is Professor and Head of the Department. The Department has 32 experienced faculty members comprising Professors, Associate Professors and Assistant Professors and 3 adjunct faculty from industry. The faculty has teaching and research expertise in various specializations like Semiconductor Device Modeling, Image processing and Machine Learning, Circuits and Systems, Wireless Communication & Networking, Embedded Systems and IoT, VLSI system Design, RF & Microwave Engineering, Electronic Instrumentation. Faculty members of the department adopt innovative teaching practices and methods of modern pedagogy for effective teaching learning process.

Furthermore, the department has been recognized as a research centre by Osmania University and three senior faculty members have been recognized as research supervisors. Currently 26 research scholars are pursuing Ph.D in the department research center. The Department maintains a robust association with the industry for student training, student projects, faculty visits, expert lectures, and for collaboration in research and development in emerging technologies.

Department fetched funding of Rs. 60 lakhs from DST under FIST scheme to establish Wireless Technology Centre. Department also

fetches funding of Rs. 11 lakhs from AICTE under MODROB scheme for Development of MIMO based 4G Wireless Communication System Laboratory.

INFRASTRUCTURE

The ECE Department is spread in an area of 2,800 Sq. Mtrs. in a separate block to cater to the needs of classrooms, laboratories and other common facilities. The Department has 12 well equipped laboratories as per the curriculum. The laboratories as per the curriculum are Electronics Workshop, Electronic Devices, Analog Electronic Circuits, Digital & Integrated Circuits, Analog and Digital Communication Engineering, Signal Processing, Microprocessors and Interfacing, VLSI Design, Microwave Engineering, PG VLSI Lab, PG advanced Communication Engineering Lab, Projects & Research Lab.

The department has the following advanced facilities to carry out research and consultancy activities in the areas of VLSI Design, Wireless Communications, Signal & Image Processing, Embedded Systems & IoT.

Hardware Research facilities:

- SDR based 6 GHz 2X2 RF Transceiver and measurement setup with IQ base band modulation (National Instruments)
- 6.5 GHz, Vector Network Analyzer (Keysight make)
- 6.5 GHz, Vector Signal Generator (Keysight make)
- National Instruments Hardware & Software Academy bundles
- TMS 320C6748 hardware development platforms for DSP applications (Texas Instruments)
- System on Chip (SoC) based hardware platforms (Xilinx make Zynq 7020)
- System on Chip (SoC) based hardware platforms (Segger boards)
- WiCom-T Software Defined Radio (SDR) Based RF Transceivers (2.4 GHz) for Wireless Communication Applications
- Vertex – II FPGA boards, CPLD / FPGA trainer kits
- Test & Measurement bundle (3 GHz Spectrum analyzer, 100 MHz digital storage oscilloscope, 15 MHz Waveform

generator, 6½ digit digital multi meter 0 to 25 volts power supply) (Agilent make)

Modeling, Design and Simulation Tools:

- Communication system design software suite (National instruments)
- Mentor graphics VLSI Design & Verification Tools : HEP-1: IC Nano meter design, HEP-2: design verification and test
- Cadence university bundle
- MATLAB 2021 b and Simulink modelling software
- National instruments academy bundle-1 and 2 Labview-2020
- Code composer studio
- Vivado design suite (Xilinx)
- Virtual system modelling software (proteus)
- SystemVue Modelling software (Keysight)
- PathWave Advanced Design System (ADS)

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

The department of Electrical and Electronics Engineering was established in the year 1999 and offers a 4-year B.E. Degree Program in Electrical & Electronics Engineering (EEE) with an annual intake of 60 students. M.E program in power systems and power electronics is established in the year 2012 with an intake of 24.

MISSION

"To impart knowledge to electrical engineering students so that they have the skills to innovate, excel and lead in their professions with values for the benefit of the society."

FACULTY

Dr. M. Chakravarthy is Professor and Head of the Department. The department has 14 qualified and dedicated faculty comprising 3 Professor, 1 Associate Professors, 10 Assistant Professors and 2 adjunct faculty from Industry. The faculty has teaching expertise in various specializations like Power Electronics & Drives, Power Systems & Electrical Machines, Renewable Energy Sources, Electric Hybrid Vehicles, Smart Grids and Control Systems.

Department is a approved research centre under OU since 2017.

Faculty published their research work in reputed journals and conferences. Department has entered into MoUs with M/S. Solar Bull LLP, , M/S. Sri Gayatri Energy Services Pvt. Ltd, M/S. Varcas Pvt. Ltd. To carry out various consultancy activities.

INFRASTRUCTURE

The EEE Department is spread in an area of 1944 sq. Mtrs. caters to classrooms, laboratories and other common facilities. The Department is equipped with 8 laboratories, 4 classrooms, 1 seminar hall with modern teaching aids and staff rooms.

The laboratories are equipped to suit the modern curriculum requirements. The Department maintains a good collaboration with renowned organizations like Research Center Imarat, DRDO, Bharat Heavy Electricals Limited (BHEL), National Thermal Power Corporation (NTPC),

Power Grid Corporation of India Limited, Central Power Research Institute (CPRI), Railway Loco Workshop, Medha Servo Drives, Siemens India Limited, GE Enterprises, ABB etc. These collaborations help students to get internships and Jobs. Under Professional Practice School 240 students carried out training in reputed Government organizations and Private Industries such as BHEL, NTPC, Locoshed etc. The department has 97 computer systems with latest softwares such as MATLAB, ETAP, LabVIEW, PSIM, PSCAD, PSPICE, MiPower etc. Under Renewable Energy generation, department takes pride in installing and maintaining 275 kW Solar Power Plant of 152 Lakhs. Under Energy conservation, department takes pride in installing sensor for automatic switch off of lights and Fans in all class rooms in the absence of human presence.

DEPARTMENT OF INFORMATION TECHNOLOGY

The Department of Information Technology was established in the year 2000 with an intake of 60, and currently has an intake of 180 students, offering the Undergraduate Programme – Bachelor of Engineering in Information Technology. We also offer an Honours degree – B.E. IT in Artificial Intelligence and Machine Learning (AI&ML).

MISSION

To enable the students, acquire outstanding competence and skills in latest IT related technologies through practice-oriented teaching and training.

The department has 30 well-qualified and experienced faculty members including 3 Professors, 8 Associate Professors, and 19 Assistant Professors, headed by Dr. K. Ram Mohan Rao, Professor. All our faculty members are persistently striving to impart sound theoretical and practical knowledge through the best practices in teaching-learning. Adjunct faculty from reputed Industry and Research Organizations is an additional strength to our department.

The faculty members of our department are committed to providing a comprehensive learning experience to our students through quality teaching and research in major advanced areas like Artificial Intelligence, Machine Learning, Deep Learning, Computer Vision, Distributed and Cloud Computing, Networking, Embedded Systems, Internet of Things, Database Management, Compiler Construction, Data structures and Algorithms through various Programming languages. We also organize several co-curricular activities focusing on the current trends in the IT industry and extra-curricular for the overall development of the students with necessary life skills, strong ethical and moral values.

Our students have been consistently placed in eminent Product Development, Consulting and Service based MNCs like Uber, Google, Amazon, ServiceNow, Oracle, CISCO, FactSet, InnCircles, DarwinBox, Deloitte, Accenture, Cognizant, TCS, Infosys, LTI, and many others, through our Campus Recruitment process.

Notable Achievements

- The Department has a consistent placement record of more than 90% over the last 4 academic years i.e., from 2018-

2019 to 2021-2022, with the highest pay package of ₹ 44 LPA secured by students of the batch who graduated in 2022.

- Our students have been participating in various National level hackathons/ coding competitions and also won several prizes.

- 84% of students have secured internships in various organizations, with the stipend ranging from Rs.15,000/- to Rs.80,000/- per month.

- Established a Deep Learning Laboratory (the total worth of ₹35 lacs) for which a grant of ₹19.31 lacs was received from AICTE under MODROBS.

- Secured a SERB project titled "Dimensionality Reduction and Pixel Classification in Hyperspectral Images" under Teachers Associateship for Research Excellence (TARE). An amount of ₹18,30,000.00 has been approved for the same.

INFRASTRUCTURE:

The Department is spread over an area of 1,908 Sq. Mtrs., which includes Classrooms, Laboratories, Department Office, and Staff rooms. The department has 8 laboratories comprising 360 high-end computer systems. All our laboratories are networked with access to the internet and central servers.

The curriculum provides an opportunity for the students to have hands-on experience in various courses viz., programming in C & Python, Data Structures, Software Engineering, JAVA, DBMS, Operating Systems (Linux), Network Programming, Web Technologies, Artificial Intelligence, and Machine Learning (AI&ML), Compiler Construction, Distributed Systems, and Cloud Computing and Network Simulation using NS2. CISCO Lab is included in the curriculum as a value-added course for the students to improve their Networking knowledge. Students are allowed to access the computing facilities and advanced tools like MATLAB, Rational Rose, IBM SPSS Modeler for data analysis, Microwind, Microprocessors and Microcontroller kits (8085, 8086 & 8051), CPLD/FPGA trainer kits, an IBM Deep learning server 8335 – GTH Server with 2 NVIDIA P100 GPU with NVlink technology with access to Power AI Framework, HP DL385 AMD Opetron Oracle Database Server and HP Proliant ML 370 G5 RedHat Enterprise Linus Server.

Well-trained supporting staff members are available in each laboratory to facilitate access to servers and open-source tools.

Our curriculum has an emphasis on providing necessary life skills to the students through the following courses.

- Communication
- Aptitude
- Critical Thinking
- Critical Reasoning
- Design Thinking
- Human Values & Professional Ethics

The department has MoUs with reputed IT organizations including CISCO, EPAM, Infosys, Progress, Pega, InnCircles, CCC and WOIR, to facilitate student training, projects, internships, and expert lectures.

DEPARTMENT OF MECHANICAL ENGINEERING

The Department of Mechanical Engineering was established in 1981 and has been affiliated to Osmania University. Currently UG program has an annual intake of 120 and PG program ME (ADM) has 18. The UG Program has been re-accredited for the fourth time for 3 years in the month of December. 2021. The PG program, ME (ADM) accredited up to June 2022. The department has started B.E. Honours program for the batch admitted in 2020-21. This enables the students to acquire BE Honours in Robotics by doing additional 18-20 credits. The department has been instrumental in getting the institution NAAC accreditation A⁺⁺ grade, five years from February 2021 and UGC autonomy granted up to 2030-2031. The department has been a recognized research centre by the Osmania university.

MISSION

To nurture an environment of research, innovation and knowledge through the latest teaching-learning practices in mechanical engineering.

The department has high qualified and long-standing faculty which includes 11 doctorates. Eminent people from IITs and industry are attached with the department as adjunct faculty. The faculty of the department collaborate closely with the industry and a good number of research scholars (23 no's) are pursuing under their supervision towards getting doctoral degree. The faculty publish research papers at various national/international journals and conferences. Some of the faculty are actively involved as reviewers for the journal papers at national and international level. The faculty regularly attend FDPs/workshops to enhance skills related to technical, pedagogy and research. It has been mandatory for the faculty to pursue certification courses offered by NPTEL/Coursera. Some of the faculty in recent years achieved top ranks in NPTEL certification courses at national level. The faculty are active members of professional bodies like ASME/IEEE/ISTE/IE(I) etc. The faculty are also actively involved in publication of patents, books and book chapters.

The department maintains good quality intake of the students. The quality and average pay package of the final year students' placements has been improving steadily over the years. The average and best packages for the academic year 2021-22 stands at Rs.10.1 Lakhs per Annum and 16.64 Lakhs per Annum respectively. A very good number of students from the department have been pursuing higher studies like MS/MBA in top IIM's in India and abroad on a consistent basis. The department encourages students to collaborate with industry and higher learning institutes for their internships and project works. It is made mandatory for the students to register and pass NPTEL certification courses. The department has well structured curriculum which includes soft skills training, technical skills training, open electives. As

part of professional electives, there are five different streams of electives so that student can become specialized in any chosen field. These five streams include design engineering, manufacturing engineering, thermal engineering, industrial engineering and automobile engineering.

The department has bagged projects worth Rs 90.57 Lakhs sanctioned in the last five years by DST, UGC & AICTE. The department has good number of MOUs with various industries, through which the students can pursue internships and projects.

The department has very good infrastructure facilities, well ventilated classrooms, laboratories and advanced and licensed software facilities. Some of the laboratories are kept open beyond college hours to facilitate more time in experiential learning and student project works. Utilizing these facilities students regularly participate in professional body activities like ASME-HPVC and SAE Baja and win prizes. Students are encouraged to improve their innovative skills. As a result, some of the students' projects were converted into products.

DEPARTMENT OF PHYSICS

Department of Physics was established in 1981.

FACULTY

Dr. A.S. Sai Prasad is professor and Head of the Department. All the 6 faculty members are well qualified and experienced. The specializations of the faculty members include materials science, condensed matter physics, luminescence, magnetic fluids, atmospheric sciences etc.

MISSION

To imbibe the spirit of scientific temper and to instill logic and analytical approaching budding engineers.

The faculty are actively involved in research work. Two sponsored research projects funded by the Atomic Energy Research Board (AERB) and UGC-MRP were successfully completed. More than 50 research papers were published by the faculty in International and national journals of high repute. Three doctoral students are working for their Ph.D. under the supervision of the faculty members of the Department. The faculty members published several book chapters.

The Department is regularly organizing National and International Conferences since 2013 on the theme of materials preparation and characterization under the title "Applied Physics and Material Science".

INFRASTRUCTURE

The Department is spread in an area of 275 Sq. m including laboratories and other common facilities. It has two laboratories namely Mechanics lab and Optics lab having latest equipment to cater the needs of B.E first year students. The equipment includes CROs, Optical fibers, lasers, gyroscope, four probe apparatus, Hall apparatus etc.

RESEARCH LAB:

The department has established Materials Research Lab. It is equipped with high temperature microprocessor controlled electric furnace (up to 1400°C), twin ball mill, microwave oven, single pan Keithley digital balance etc.

DEPARTMENT OF MATHEMATICS

MISSION

To impart in-depth knowledge of mathematics and its applications in various fields of engineering so as to enable the students to meet the challenges of the Engineering Problems with courage, confidence, conviction and competence.

FACULTY

The Department of Mathematics was established in year 1981. Dr.T.Sudhakar Rao is the Head of the Department. The Department has 7 faculty members and caters the teaching needs of the students in Mathematics. Two of them are doctorates. The department is actively engaged in the

promotions of mathematical applications through **MATHS CLUB**.

DEPARTMENT OF CHEMISTRY

Department of Chemistry was established in 1981.

FACULTY:

Dr. P.Venugopal is Head of the Department. The department has 6 experienced faculty members. Five of them are doctorates. One UGC sponsored minor project has been completed. The faculty members have published more than 35 research papers in International and National journals.

MISSION

To infuse knowledge of chemical principles of engineering materials to the prospective engineers

Infrastructure:

The department is spread in an area of 398 Sq. Meters including laboratories with latest equipments such as Potentiometers, Colorimeters, pH meters, Conductivity meters and Spectro-photometer etc.

DEPARTMENT OF HUMANITIES & SOCIAL SCIENCES

MISSION

To nurture the budding professionals to face dynamic situations of the business world through training, mentoring, and counseling by creating a 'learning rich' environment."

The Department, at present, offers courses in English and Economics. It has carved a unique niche by offering various value-added courses.

FACULTY

Ms.K.Jhansi Rani the Head of the Department. The department has seven faculty members who have a strong foundation in communication skills and phonetics.

INFRASTRUCTURE

The Department of English has comprehensive laboratories in an area of 173 Sq. meters. It provides training in communication and interpersonal skills, accent neutralization, soft skills and presentation skills to mention a few. The Phonetics & Interactive communication skills laboratories help students develop their communication as well as interpersonal skills thus enhancing their confidence levels and marginalizing their first language influence. The English Language Lab is upgraded to Multi media Lab with 34 computer systems containing Hi Class Software. The language software includes Sky pronunciation suite, Lets do business, and Connected speech from Young India. The total cost of major equipment/instruments in the Department is about Rs.31.00 lakhs.

DEPARTMENT OF PHYSICAL EDUCATION

Department of Physical Education plays a crucial role in encouraging the students to nurture the inherent talents in sports and games. Qualified and experienced faculty serves the needs of the students. The college has good indoor and outdoor sports & games facilities like table tennis, carom, chess, shuttle badminton, cricket, valley ball, basketball, etc. The college student teams have been consistently winning various prizes/medals at Inter-Collegiate, Inter-University and also at various National Level Tournaments.

DEPARTMENT OF HUMAN RESOURCES

Human Resources (HR) Department provides career guidance and counseling to the outgoing budding engineers. It prepares students to meet the industry's requirements and enrich them to suit the corporate world with excellent soft skills. The HR Department organizes personality development programs and looks after campus placements of the students. It takes care of pre-placement training & placements. It explores the various career options in the fields of All India Civil Services, All India Engineering Services, Scientific, Research and Industrial Organizations,

Army, Navy and Air force in addition to arranging counseling sessions on higher education avenues in India and abroad. Human Resources wing is headed by Prof. Kishore, Director, Training & Placement. Sri. K. Srinivasa Chakravarthy is Assistant Director.

ACADEMIC AND EXAMINATIONS BRANCH

Academic and Examinations Branch takes care of all the academic requirements of students starting from admission processes, collection of original certificates at the time of admission, issue of i.d cards, syllabus books, photo copies of original certificates deposited in the college, course completion certificates, custodian forms, and return original certificates at the time of leaving and also issue transfer and bona-fide certificates, migration certificate, provisional degree certificate, consolidate marks memos, etc.

DIRECTOR – STUDENT WELFARE

Sri K. Ramakrishna is the DSW. This wing of the college looks after the student facilities and addresses problems of students. The DSW takes care of the amenities, proctorial system, transport facilities, financial assistance, student bus passes, railway concessions, certification of scholarship applications and Student Bonafide certificates.

ACCOUNTS SECTION

The account section collects tuition fee, special fee, examination fee, medical condonation fee, process and disbursement of state social welfare scholarships, national merit scholarships, AICTE stipends to obtain education loan from banks, refund of caution deposits and issue of no due certificates.

STUDENT COUNSELLOR

The student counsellor services are provided to the students to give guidance on personal, social and psychological problem

PERSONAL NOTES

Telephone Numbers

[illegible]