AUDISANKARA
COLLEGE OF ENGINEERING & TECHNOLOGY
An Autonomous Institute Affiliated to JNTUA, Ananthapuram & Accredited by NAAC

ASCET
Originating the Bright Careers
AUDISANKARA

ACADEMIC COUNCIL OF THE COLLEGE – 2019-20 A.Y

S.No	Name	Designation	Affiliation
1	Prof.N.Seshaiah	Chairman	Principal, ASCET, Gudur
2	Prof.A.Mohan Babu	Member	Director, ASCET, Gudur
3	Prof.G.Sudheer	Member	Head, Dept, of Civil Engg., ASCET, Gudur
4	Prof.D.V.Vara Prasad	Member	Head, Dept, of CSE Engg., ASCET, Gudur
5	Prof.G.Rathnaiah	Member	Head, Dept, of EEE Engg., ASCET, Gudur
6	Prof.K.Dhanumjaya	Member	Head, Dept, of ECE Engg., ASCET, Gudur
7	Prof. Michel Joseph Stalin	Member	Head, Dept, of ME Engg., ASCET, Gudur
8	Dr.Y.Haranath	Member	Head, Dept, of H&S Engg., ASCET, Gudur
9	Prof.G.Suresh Kumar	Member	CoE & Professor in ME ASCET, Gudur
10	Dr. B.Samson Herald	Member	Head, Dept, of MBA Engg., ASCET, Gudur
11	Prof.V.Chandra Sekhar	Member	Head, Dept, of MCA Engg., ASCET, Gudur
12	Dr.A.Immanuel	Member	Associate Prof, Dept. of EEE, ASCET, Gudur
13	Dr.M.Rajaiah	Member	Dean Academics ASCET, Gudur
14	Prof.J.Suresh	Member	Dean Student Affairs, ASCET, Gudur
15	Prof. S.V.Satyanarayana	Ex-Officio Member	Director, Academics and Planning, JNTUA Ananthapuram
16	Prof.C.Sasidhar	Ex-Officio Member	Director of Evaluation JNTUA Ananthapuram

17	Prof V.Sankar	Member	Professor in EEE Department, JNTUA, Ananthapuramu
18	Dr.S.V.Ramana	Member	Principal, Vasavi Engineering College
19	Dr.K.Ramji	Member	Professor, Department of ME, AUCE, Vizag
20	Sr.B.V.Subba Rao	Member	General Manager, SDSC SHAAR Sriharikota
21	Sri. P.Vijaya Kumar Reddy	Member	Advocate, Nellore
22	Sri.N.Sudarshan Reddy	Member	Senior GM, Nelcast, Gudur
23	Mr. K. Srinivasa rao	Member	Executive Engineer, Nodal, S.I division Nellore Andhra Pradesh
24	Dr.Madhava Rao Kodali	Member Secretary	Professor, EEE, ASCET, Gudur

PRINCIPAL
AUDISANKARA COLLEGE OF
ENGINEERING & TECHNOLOGY
(AUTONOMOUS)
GUDUR, NELLORE Dt., (A.P.)

AUDISANKARA COLLEGE OF ENGINEERING & TECHNOLOGY
(AUTONOMOUS)
Gudur, Nellore Dist - 524101, A.P (India)

7th MEETING OF THE ACADEMIC COUNCIL OF THE COLLEGE

Date: 06-08-2018

Time: 01:00 P.M.

Venue : Principal Chamber, ASCET, Gudur.

The 7th meeting of Academic Council of Audisankara College of Engineering & Technology was held on 06-08-2018 at 01:00 PM in the Principal Chamber of the College and the following resolutions are passed after careful consideration to approve the recommendations made by the ACC as applicable w.e.f. 2018-19.

Prof.K.Dhanunjaya, Principal i/c & the Chairman of ACC presided over the meeting.

AGENDA:

1. Ratification of Board of Studies members
2. Review of the minutes of previous meeting
3. SWOC and Gap Analysis of R16 Regulations
4. Review and Approval of B.Tech Academic Rules and Regulations of R18 Regulations
5. Review and Approval of M.Tech Academic Rules and Regulations of R18 Regulations
6. Review and Approval of MBA Academic Rules and Regulations of R18 Regulations
7. Review and Approval of MCA Academic Rules and Regulations of R18 Regulations
8. Review and Approval of the Course titles and content of all UG programmes under R18 Regulations
9. Review and Approval of the Course titles and content of all PG (M.Tech) programmes under R18 Regulations
10. Review and Approval of the Course titles and content of MBA programme under R18 Regulations
11. Review and Approval of the Course titles and content of MCA programme under R18 Regulations
12. Review and Approval of the Syllabus for III B.Tech (CE, EEE, ME, ECE & CSE) 5th and 6th Semesters for R16 Regulations
13. Review and Approval of the Syllabus for IV B.Tech (CE, EEE, ME, ECE & CSE) 7th and 8th Semesters for R16 Regulations
14. Any other item

Detailed schedule of the meeting

S.No	Date	Time	Venue
1	6th August, 2018 (Monday)	01:00 PM to 06:00 PM	Principal Chamber, ASCET

Members Present:

S.No	Name	Designation	Affiliation
1	Prof.K.Dhanunjaya	Chairman	Principal, ASCET, Gudur
2	Prof.T.Venu Madhav	Member	Head, Dept, of Civil Engg., ASCET, Gudur
3	Prof.P.V.V.S.Srinivas	Member	Head, Dept, of CSE Engg., ASCET, Gudur
4	Prof.J.Suresh	Member	Head, Dept, of EEE Engg., ASCET, Gudur
5	Prof.K.Dhanumjaya	Member	Head, Dept, of ECE Engg., ASCET, Gudur
6	Prof. M.Vamsi krishna	Member	Head, Dept, of ME Engg., ASCET, Gudur
7	Prof.M.Rajaiah	Member	Head, Dept, of H&S Engg., ASCET, Gudur
8	Prof.G.Suresh Kumar	Member	CoE & Professor in ME ASCET, Gudur
9	Prof. A.M.Mahaboob Basha	Member	Head, Dept, of MBA Engg., ASCET, Gudur
10	Prof.V.Chandra Sekhar	Member	Head, Dept, of MCA Engg., ASCET, Gudur
11	Dr.A.Immanuel	Member	Associate Prof, Dept. of EEE, ASCET, Gudur
12	Dr.Ch.Madhuramma	Member	Associate Prof, Dept. of CE, ASCET, Gudur
13	Mr.J.Amarendra	Member	Associate Prof, Dept. of ECE, ASCET, Gudur
14	Prof.M.Vijaya Kumar	Ex-Officio Member	Director, Academics and Planning, JNTUA Ananthapuram

15	Prof.S.V.Satyanarayana	Ex-Officio Member	Director of Evaluation JNTUA Ananthapuram
16	Prof V.Sankar	Member	Professor in EEE Department, JNTUA, Ananthapuramu
17	Dr.S.V.Ramana	Member	Principal, Vasavi Engineering College
18	Dr.K.Ramji	Member	Professor, Department of ME, AUCE, Vizag
19	Sr.B.V.Subba Rao	Member	General Manager, SDSC SHAAR Sriharikota
20	Sri. P.Vijaya Kumar Reddy	Member	Advocate, Nellore
21	Sri.N.Sudarshan Reddy	Member	Senior GM, Nelcast, Gudur
22	Mr. K. Srinivasa rao	Member	Executive Engineer, Nodal, S.I division Nellore Andhra Pradesh
23	Dr.Madhava Rao Kodali	Member Secretary	Professor, EEE, ASCET, Gudur

Dr.M.R.Kodali – Member Secretary – ACC welcomed the Chairman and members of the Academic Council of the College to permit to start the proceedings of the meeting.

The Chairman has also cordially welcomed the members of Academic Council and sought the whole hearted support of the members for the healthy growth of the college.

MINUTES:

ITEM-I

Ratification of Board of Studies Members

Resolution No :1/ACC-7

Members reviewed and unanimously approved the Board of Studies members of following boards is constituted with the following members for a period of three years with effective from the academic year 2018-19

Department of Civil Engineering:

S.No	Name of the Member	Designation	Role of the BoS
1	Mr.T.Venumadhav	Associate Professor & HOD	Chairman
		Department Faculty	
2	Dr.CH.Madhuramma	Professor	Member
3	Mr.G.Venkata Siva Sai Kumar	Assistant Professor	Member
4	Mr.Y.Sreekanth	Assistant Professor	Member
		Subject Experts	
5	Prof.G.Appa Rao	Prof in Civil Engg. Dept., IIT Madras. Chennai-600036. T.N	Member
6	Dr.I.V.Ramana Reddy	Professor-CE, SV University, Tirupati.	Member
7	Dr.Amarendra Kumar Sandra	Associate Professor, IIT, Pulivendula	Member
		University Nominee	
8	Dr. H.Sudarshan Rao	Professor-CE, JNTUA College of Engineering, Ananthapur	Member
		Industry Representative	
9	Mr.K.Srinivasa Rao	Deputy SE, Irrigation Circle, Nellore, AP	Member
		Alumini	
10	Ms.N.Sowmya	AEE, Irrigation Department Naidupeta	Member

Department of Electrical & Electronics Engineering:

S.No	Name	Designation	Role in BOS
1	Prof. J. Suresh	Professor & HOD	Chairman
		Subject Experts	
2	Dr. K. Siva Kumar	Professor	Member
3	Dr. D M Vinod Kumar	Professor	Member
4	Dr. G V Marutheswar	Professor	Member
		University Nominee	
5	Dr. M. Vijay Kumar	Professor, Dept. of EEE, JNTUA College of Engineering, Anantapur JNTUA	Member
		Department faculty	
6	Dr.M.R.Kodali	Professor	Member
7	Dr.A.Immanuel	Associate Professor	Member
8	Mr. S.Dayanand	Associate Professor	Member
9	Mr. K. C. Rama Krishnan	Associate Professor	Member
10	Mr. G. Rathnaiah	Assistant Professor	Member
11	Mr.G. Subba reddy	Assistant Professor	Member
		Industry Expert	
12	Dr. K. Srinivas	Divisional Engineer	Member
		Alumni	
13	Ch. Dwarakanath	Senior Engineer	Member

Department of Mechanical Engineering:

S.No	Name	Designation	Role of BOS
1	Dr .M.Vamsi Krishna	Associate professor	Chairman
Subject Experts			
2	Dr.A.Venu Gopal	Professor Dept.of Mechanical Engineering National Institute of technology Technology, Warangal	Member
3	Prof. G. Padmanabhan	Principal Sree Venkateswara University of College of Engineering Tirupati	Member
University Nominee			
4	Dr. K. Hema Chandra Reddy	Professor Dept.of Mechanical Engineering, JNTU-Ananthapuram	Member
Department Faculty			
5	Mr.G.Suresh Kumar	Associate professor	Member
6	Mr. K.Abraham	Associate professor	Member
7	Mr. B.L.Rama Naryana	Associate professor	Member
8	Mr. K.Ramesh	Assistant professor	Member
9	Mr. G.Siva Kumar	Assistant professor	Member
10	Mr. K.Bala Pratap	Assistant professor	Member
Industry Expert			
11	Mr. N.Sudharshan reddy	General Manager-Plant Head NELCAST, Nellore	Member
Alumni of the Department			
12	Mr. D.Vamsi	Infosys Trainee Engineering, Mysore	Member

Department of Electronics & Communication Engineering:

S.No	Name	Designation	Role of BOS
1	Prof. K.Dhanumjaya	HOD ECE	Chairman
Subject Experts			
2	Dr. M.Rama Subbareddy	Professor, IITM	Member
3	Dr.NVSN Sarma	Professor, NITW	Member
4	Dr. G.Srinivasulu	Professor, SVUCE	Member
University Nominee			
4	Dr.V.Sumalatha	Professor, JNTUA	Member
Department Faculty			
5	Mr. P.Sreenivasulu	Associate Professor	Member
6	Mr. J.Amarendra	Associate Professor	Member
7	Mrs. M.Kezia Aruna Jyothi	Associate Professor	Member
8	Mrs. P.Sarvani	Associate Professor	Member
9	Mrs. V.Bharani	Associate Professor	Member
10	Mr. S.Surendra Babu	Associate Professor	Member
Industry Expert			
11	Sri B.V.Subbarao	GM,SDSC-SHAR	Member
Alumni of the Department			
12	Ms. MD.Unnisa Begum	Analog Engineer, NI,Banglore	Member

Department of Computer Science & Engineering:

S.No	Name	Designation	Role of BOS
1	Mr.P.V.V.S.Srinivas	Assoc.Prof, Incharge HOD-CSE	Chairman
Subject Experts			
2	Dr.R.B.V.Subramanyam	Professor,NIT, Warangal	Member
3	Dr.CHDV.Subba Rao	Professor,SVU,Tirupathi	Member
University Nominee			
4	Dr.P.Chenna Reddy	Professor,Dept.Of.CSE,JNTUA	Member
Department Faculty			
5	Mr.V.Sreenatha Sarma	Asst.Professor	Member
6	Mrs.Saritha Dasari	Asst.Professor	Member
7	Mr.D.Arun Prasad	Asst.Professor	Member
8	Mr. D.Nagaraju	Asst.Professor	Member
9	Mrs.N.Lakshmi Chaitanya	Asst.Professor	Member
10	Mr.G.Rajesh	Asst.Professor	Member
Industry Expert			
11	Dr.K.Sudheer Reddy	Founder & Head Technology, Intelligent Nxt Solution , Hyderabad	Member
Alumni of the Department			
12	Mr.CH.Srihari	Principle Member, Technical Oracle, Bangalore	Member

Department of Mathematics:

S.No	Name	Designation	Role of BOS
1	Dr.M.Rajaiah	Professor & HoD	Chairman
		Subject Experts	
2	Dr.S.Sreenadh	Professor, Dept.of Mathematics SVUniversity,Tirupati	Member
3	Dr.P.Vasudeva Reddy	Professor, Dept.of Mathematics Andhra University, Vizag	Member
		University Nominee	
4	Dr.YVSS Sanyasi Raju	Professor, Dept.of Mathematics IIT, Madras	Member
		Department Faculty	
5	Dr.Y.Harnadh	Assoc,Professor	Member
6	Dr.C.Suresh Babu	Assoc.Professor	Member
7	Mr.Ch.Suresh	Asst.Professor	Member
8	Mr.V.Jagadesh	Asst.Professor	Member
9	Mrs.B.Padma	Asst.Professor	Member
10	Mrs.Y.NagaVeni	Asst.Professor	Member
		Industry Expert	
11	Mr.Y.VidyaSagar	Managing Director, CitrusPvt.,Ltd, Gudur	Member

Department of Physics:

S.No	Name	Designation	Role of BOS
1	Dr.M.Rajaiah	Professor & HoD	Chairman
		Subject Experts	
2	Dr.Murthy VRK	Professor, Dept.of Physics IIT,Madras	Member
3	Dr.K.T.RamaKrishnaReddy	Professor, Dept.of Physics SVUniversity,Tirupati	Member
		University Nominee	
4	Dr.K.Thyagarajan	Professor, Dept.of Physics JNTUACEP,Pulivendula	Member
		Department Faculty	
5	Mr.P.V.Ramanaiah	Asst.Professor	Member
6	Mrs.V.S.Samyuktha	Asst.Professor	Member
		Industry Expert	
7	Mr.Y.VidyaSagar	Managing Director,CitrusPvt.,Ltd,Gudur	Member

Department of Chemistry:

S.No	Name	Designation	Role of BOS
1	Dr.M.Rajaiah	Professor & HoD	Chairman
Subject Experts			
2	Dr.G.RangaRao	Professor, Dept.of Chemistry IIT,Madras	Member
3	Dr.D.Srinivasulu	Professor, Dept.of Chemistry SVUniversity,Tirupati	Member
University Nominee			
4	Dr.G.V.SubbaReddy	Professor, Dept.of Chemistry JNTUACEP,Pulivendula	Member
Department Faculty			
5	Dr. A. Vani	Professor	Member
6	Dr.C.Giridhar	Assoc,Professor	Member
7	Mr.T.K.MadhuSudhan	Asst.Professor	Member
Industry Expert			
8	Mr.Y.VidyaSagar	Managing Director,CitrusPvt.,Ltd,Gudur	Member

Department of English:

S.No	Name	Designation	Role of BOS
1	Dr.M.Rajaiah	Professor & HoD	Chairman
		Subject Experts	
2	Dr.K.Sumakiran	Professor, Dept.of English SV University,Tirupati	Member
3	Dr.R.Prabhakar	Professor, Dept.of English VS University,Nellore	Member
		University Nominee	
4	Dr.V.B.Chithra	Professor, Dept.of Dept.of English JNTUA,Anatapuramu	Member
		Department Faculty	
5	Mr.G.HariKrishna	Asst.Professor	Member
6	Mrs.Y.UmaDevi	Asst.Professor	Member
7	Mrs.D.M.Sukumar	Asst.Professor	Member
		Industry Expert	
8	Mr.Y.VidyaSagar	Managing Director,CitrusPvt.,Ltd,Gudur	Member

Department of Master of Business Administration:

S.No	Name	Designation	Role in BOS
1	Dr.A.M.Mahaboob Basha	Assistant Professor & HOD	Chairperson
		Subject Experts	
2	Prof.T.Srinivas	Professor DEAN, Faculty of Commerce, Management & Law Yogi Vemana University, Kadapa. tallurus@gmail.com	Member
3	Prof.J.Katyayani	Professor Department of Business Management Sri Padmavathi Mahila University, Tirupati jkatyayani@gmail.com	Member
4	Dr.P.Chenchu Reddy	Associate Professor, Department of Management Studies Vikrama Simhapuri University, Nellore drpcreddy9@gmail.com	Member
		University Nominee	
5	Prof.M.L.S Deva Kumar	Vice- Principal, JNTUA College of Engineering, Anantapur Jawaharlal Nehru Technological University, Ananthapur	Member
		Department faculty	
6	Mr.G.Venkateswarlu	Assistant Professor, Specialization: Finance and Marketing Audisankara College of Engineering & Technology	Member
7	Mr.Y.Bharani Srinivas	Assistant Professor, Specialization: Finance and Marketing Audisankara College of Engineering & Technology	Member
8	Mrs.C.M.Salma	Assistant Professor, Specialization: HRM and Finance	Member
9	Mr.G.Murali Krishna	Assistant Professor, Specialization: HRM and Marketing	Member
10	Mr.G.Sainath	Assistant Professor Specialization : HRM and Finance	Member
11	Mr.C.Vijay Kumar	Assistant Professor Specialization: Marketing and Finance	Member
		Industry Expert	
12	**Mr.T.Rajendra Prasad**	Executive Director, KSSPL, Krishnapatnum Port Nellore(Dt), Andhra Pradesh rajendraprasadt@krishnapatnamport.com	**Member**
		Alumni	
13	**Miss.K.Hemalatha**	**Junior Officer** Department of Finance, Piolax India Private limited Hemalathakodamati1012@gmail.com	**Member**

Department of Master of Computer Application:

S.No	Name	Designation	Role of BOS
1	Mr.V.Chandra Sekhar	Assoc.Professor, Incharge HOD- MCA	Chairman
Subject Experts			
2	Dr.R.S.Rama Krishna	Professor,SVU,Tirupathi	Member
3	Dr.P.Ramesh Reddy	Professor,VSU,Nellore	Member
University Nominee			
4	Dr.A.P.Shiva Kumar	Asst.Professor Dept.0f.MCA,JNTUA	Member
Department Faculty			
5	Mrs.N.Shobha Rani	Asst.Professor	Member
6	Ms.K.Nishitha	Asst.Professor	Member
7	Mr.P.Nagaraju	Asst.Professor	Member
8	Mr.G.Srinivasulu	Asst.Professor	Member
9	Mr.L.D.Kishore	Asst.Professor	Member
Industry Expert			
10	Dr.K.Sudheer Reddy	Founder & Head Technology, Intelligent Nxt Solution , Hyderabad	Member
Alumni of the Department			
11	Mrs.D.Prasanthi	Lead Accentre Technology , Banglore	Member

ITEM-II

Review of the minutes of previous meeting.

Resolution No :2/ACC-7

Members reviewed the minutes of the previous meeting and it's Action Taken Report

ITEM-III

SWOC and Gap Analysis of R16 Regulations.

Resolution No :3/ACC-7

Members reviewed the SWOC analysis of the existing R16 regulations and analyzed to best practices at the bench marking institutions.
Based on the analysis, members suggested to incorporate the following points

1. Revised R18 Regulations as suggested by AICTE model curriculum.
2. Number of theory subjects in a semester is restricted to 5 subjects to accommodate self learning and CRT.
3. More exposure to Industry/Practical oriented teaching.
4. Introducing certification courses in advance technologies.

ITEM-IV

Review and Approval of B.Tech Academic Rules and Regulations of R18 Regulations.

Resolution No :4/ACC-7

ACC has unanimously approved B.Tech Academic Rules and Regulations of R18 Regulations with the following suggestions.

Members reviewed the B.Tech Academic Rules and Regulations of R18 Regulations as follows:
For Four Year regular programme :

For pursuing four year undergraduate Bachelor Degree programme of study in Engineering (B.Tech) offered by AUDISANKARA COLLEGE OF ENGINEERING & TECHNOLOGY under Autonomous status and herein after referred to as ASCET.

1.0 CHOICE BASED CREDIT SYSTEM

The Indian Higher Education Institutions (HEI's) are changing from the conventional course structure to Choice Based Credit System (CBCS) along with introduction to semester system at first year itself. The semester system helps in accelerating the teaching-learning process and enables vertical and horizontal mobility in learning.

The credit based semester system provides flexibility in designing curriculum and assigning credits based on the course content and hours of teaching. The choice based credit system provides a 'cafeteria' type approach in which the students can take courses of their choice, learn at their own pace, undergo additional courses and acquire more than the required credits, and adopt an interdisciplinary approach to learning.

Choice Based Credit System (CBCS) is a flexible system of learning and provides choice for students to select from the prescribed elective courses. A course defines learning objectives and learning outcomes and comprises of lectures / tutorials /

laboratory work / field work / project work / comprehensive Examination / seminars / assignments / alternative assessment tools / presentations / self-study etc. or a combination of some of these.

Under the CBCS, the requirement for awarding a degree is prescribed in terms of number of credits to be completed by the students.

The CBCS permits students to:

- Choose electives from a wide range of elective courses offered by the departments.
- Undergo additional courses of interest.
- Adopt an interdisciplinary approach in learning.
- Make the best use of expertise of the available faculty.

2.0 ELIGIBILITY FOR ADMISSION

The total seats available as per the approved intake are grouped into two categories viz. category A and Category B with a ratio of 70:30 as per the state government guidelines vide G.O No.52.

2.1 The admissions for category A and B seats shall be as per the guidelines of Andhra Pradesh State Council for Higher Education (APSCHE) in consonance with government reservation policy.

- Under Category A: 70% of the seats are filled through EAMCET counseling.
- Under Category B: 30% seats are filled based on 10+2 merits in compliance with guidelines of APSCHE.

2.2 Admission eligibility-Under Lateral Entry Scheme Students with diploma qualification have an option of direct admission into 2nd year B. Tech. (Lateral entry scheme). Under this scheme 10% seats of sanctioned intake will be available in each course as supernumerary seats. Admissions to this three year B Tech later entry Programme will be through ECET. The maximum period to complete B. Tech. under lateral entry scheme is six consecutive academic years from the date of joining.

3.0 DURATION OF PROGRAMME

The course duration for the award of the Degree in **Bachelor of Technology** will be four academic years, with two semesters in each year. However if a student is unable to complete the course within 4 years, he/ she can do so by giving more attempts but within 8 consecutive academic years from the date of admission.

Academic Calendar

For all the eight semesters a common academic calendar shall be followed in each semester by having sixteen weeks of instruction, one week for the conduct of practical exams and with three weeks for theory examinations and evaluation. Dates for registration, sessional and end semester examinations shall be notified in the academic calendar of every semester. The schedule for the conduct of all the curricular and co-curricular activities shall be notified in the planner.

4.0 MEDIUM OF INSTRCTION

The medium of instruction shall be English for all courses, examinations, seminar presentations and project work. The curriculum will comprise courses of study as given in course structure, in accordance with the prescribed syllabi.

5.0 BRANCHES OF STUDY

- Civil Engineering (CE)
- Electrical & Electronics Engineering (EEE)
- Mechanical Engineering (ME)
- Electronics & Communication Engineering (ECE)
- Computer Science & Engineering (CSE)

6.0 TYPES OF COURSES

6.1 Foundation / Skill Course:

Foundation courses are the courses based upon the content leads to enhancement of skill and knowledge as well as value based and are aimed at man making education. Skill subjects are those areas in which one needs to develop a set of skills to learn anything at all. They are fundamental to learning any subject.

6.2 Core Course:

There may be a core course in every semester. This is the course which is to be compulsorily studied by a student as a core requirement to complete the requirement of a programme in a said discipline of study.

6.3 Elective Course:

Electives provide breadth of experience in respective branch and applications areas. Elective course is a course which can be chosen from a pool of courses. It may be:

- Supportive to the discipline of study
- Providing an expanded scope
- Enabling an exposure to some other discipline/domain
- Nurturing student's proficiency/skill.

An elective may be discipline centric (Professional Elective) focusing on those courses which add generic proficiency to the students or may be chosen from an unrelated discipline called as "Open Elective".

There are four professional elective groups; students can choose not more than two courses from each group. Overall, students can opt for four professional elective courses which suit their project work in consultation with the faculty advisor/mentor. Nevertheless, one course from each of the two open electives has to be selected.

6.4 Mandatory Course:

For mandatory courses like Induction Training, Environmental Sciences, Indian Constitution, Essence of Indian Traditional Knowledge, a student has to secure 40 marks out of 100 marks (i.e 40% of the marks allotted) in the continuous internal evaluation for passing the subject/course. For **Mandatory** courses "Satisfactory" or "Unsatisfactory" shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA.

6.5 Activity Point Programme (APP):

For Activity Point Programme (APP) courses like Professional Society Activities, Communication Skills Practice, Soft Skills Practice, Quantitative Aptitude and Technical Aptitude, a student has to secure 40 marks out of 100 marks (i.e 40% of the marks allotted) in the continuous internal evaluation for passing the subject/course. For **APP** courses "Satisfactory" or "Unsatisfactory" shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA.

6.6 NCC/ NSO and NSS Courses:

For the courses of NCC / NSO and NSS, a satisfactory participation certificate shall be issued to the student from the authorities concerned.

6.7 Mandatory/ Non-credit Courses Marks/Grade:
No marks or letter grade shall be allotted for all mandatory/non-credit courses.

7.0 SEMESTER STRUCTURE
Each academic year is divided into two semesters, TWO being MAIN SEMESTERS (one odd + one even). Main Semesters are for regular class work. However, the following cases are exempted:

7.1 Students admitted on transfer from JNTUA affiliated institutes, Universities and other institutes in the subjects in which they are required to earn credits so as to be on par with regular students as prescribed by concerned 'Board of Studies'.

7.2 Each main semester shall be of 21 weeks (Table 1) duration and this period includes time for registration of courses, course work, examination preparation and conduct of examinations.

7.3 Each main semester shall have a minimum of 90 working days; out of which number of contact days for teaching / practical are 75 and 15 days for conduct of exams and preparation.

7.4 The academic calendar shown in Table 1 is declared at the beginning of the academic year.

Table 1: Academic Calendar

FIRST SEMESTER (21 weeks)	I Spell Instruction Period	8 weeks	19 weeks
	I Mid Examinations	1 week	
	II Spell Instruction Period	8 weeks	
	II Mid Examinations	1 week	
	Preparation and Practical Examinations	1 week	
	Semester End Examinations		2 weeks
Semester Break and Supplementary Examinations			2 weeks
SECOND SEMESTER (21 weeks)	I Spell Instruction Period	8 weeks	19 weeks
	I Mid Examinations	1 week	
	II Spell Instruction Period	8 weeks	
	II Mid Examinations	1 week	
	Preparation & Practical Examinations	1 week	
	Semester End Examinations		2 weeks
Summer Vacation and Supplementary Examinations			8 weeks

8.0 REGISTRATION

8.1 Each student has to compulsorily register for course work at the beginning of each semester as per the schedule mentioned in the Academic Calendar. It is absolutely compulsory for the student to register for courses in time. The registration will be organized departmentally under the supervision of the Head of the Department.

8.2 IN ABSENTIA registration will not be permitted under any circumstance.

8.3 At the time of registration, students should have cleared all the dues of Institute and Hostel in the previous semesters, paid the prescribed fees for the current semester and not been debarred from institute for a specified period on disciplinary or any other ground.

9.0 UNIQUE COURSE IDENTIFICATION CODE

Every course of the B.Tech program will be placed in one of the four groups of courses as listed in the Table 2. The various courses and their two-letter codes are given below;

Table 2: Group of Courses

1	Civil Engineering	01
2	Electrical & Electronics Engineering	02
3	Mechanical Engineering	03
4	Electronics & Communication Engineering	04
5	Computer Science & Engineering	05

10.0 CURRICULUM AND COURSE STRUCTURE

The curriculum shall comprise Foundation/ Skill Courses, Core Courses, Elective Courses, Open Electives, Laboratory Courses, Technical Seminar, Term Paper, Communication Skills Practice, Soft Skills Practice, Professional Society Activities, Mini Project, Internship and Major Project and Comprehensive Viva-Voce. The list of elective courses may include subjects from allied disciplines also.

Contact Periods: Depending on the complexity and volume of the course, the number of contact periods per week will be assigned. Each Theory and Laboratory course carries credits based on the number of hours/week as follows:

- Contact classes (Theory): 1credit per lecture hour per week.
- Tutorial Classes (Theory): 1credit per 2 lecture hours per week.
- Laboratory Hours (Practical): 1 credit for 2 Practical hours.

10.1 **Credit distribution for courses offered is shown in Table 3.**

Table 3: Credit distribution

S. No	Course	Hours	Credits
1	Theory Course (Core/Foundation/Elective)	3	3
2	Theory Course (Core/Foundation/Elective)	4	4
3	Theory Course (Core/Foundation/Elective)	3	3
4	Open Elective Courses	2	2
5	Drawing Courses	+4	3
6	MOOC Courses	3	3
7	Laboratory Courses	4	2
8	Laboratory Courses	2	1
9	Technical Seminar	2	1
10	Term Paper	2	1
11	Project Work Phase-I	4	2
12	Comprehensive Assessment	2	1
13	Project Work Phase-II	20	10
14	Mandatory Courses	2	0
15	Internship	20	10
16	Professional Society Activities	2	0
17	Soft Skills Practice	2	0
18	Communication Skills Practice	2	0
19	Quantitative Aptitude	2	0
20	Technical Aptitude	2	0

10.2 **Course Structure**

Every program of study shall be designed to have 42 theory courses and 20 laboratory courses. Every course of the B.Tech program will be placed in one of the eight categories with minimum credits as listed in the Table 4.In addition, a student has to carry out a Project Work Phase-I, Project Work Phase-II and Comprehensive Assessment.

Table 4: Category Wise Distribution of Credits

S. No	Course	Credits	Total Credits
1	Humanities and Social Sciences (HS), including Management.	HS (05% to 10%)	**08**
2	Basic Sciences (BS) including Mathematics, Physics and Chemistry.	BS (10% to 15%)	**19**
3	Engineering Sciences (ES), including Workshop, Drawing, Basics of Electrical / Electronics / Mechanical / Computer Engineering.	ES (10% to 15%)	**20**
4	Professional Subjects - Core (PC), relevant to the chosen specialization/branch.	PC (40% to 50%)	**74**
5	Professional Subjects - Electives (PE), relevant to the chosen specialization/branch.	PE (10% to 15%)	**18**

6	Open Subjects - Electives (OE), from other technical and/or emerging subject areas.	OE (01% to 5%)	**06**
7	Project Work and Comprehensive Viva-Voce, Mini Project and Internship	5% to 10%	**13**
8	Technical Seminar and Term Paper	CRT	**02**
TOTAL			**160**

10.3 For Four year regular programme :

B.Tech I Semester	5 Foundation	Induction Training + 3	20
B.Tech II Semester	5 Foundation	3	20
B.Tech III Semester	5 + 1 (2 Credit Course)	3 + Mandatory Course	20
B.Tech IV Semester	5 + 1 (2 Credit Course)	3 + Technical Seminar	21
B.Tech V Semester	5 + OE-I (2 Credit Course)	3 + Mandatory Course	20
B.Tech VI Semester	5 + OE-II (2 Credit Course)	3 + Term Paper	21
B.Tech VII Semester	4 + OE-III (2 Credit Course)	3 + Comprehensive Assessment + PW Phase-I	19
B.Tech VIII Semester	3	Project Work Phase-II	19
Total	42	20+TS+TP+ Project Work Phase-I + Comprehensive Assessment + Project Work Phase-II	160

10.4 For Three year lateral entry programme :

B.Tech III Semester	5 + 1 (2 Credit Course)	3 + Mandatory Course	20
B.Tech IV Semester	5 + 1 (2 Credit Course)	3 + Technical Seminar	21
B.Tech V Semester	5 + OE-I (2 Credit Course)	3 + Mandatory Course	20
B.Tech VI Semester	5 + OE-II (2 Credit Course)	3 + Term Paper	21
B.Tech VII Semester	4 + OE-III (2 Credit Course)	3 + Comprehensive Assessment + PW Phase-I	19
B.Tech VIII Semester	3	Project Work Phase-II	19
Total	32	14 + TS + TP + Project Work Phase-I + Comprehensive Assessment + Project Work Phase-II	120

10.11 Course wise break-up for Regular program:

Total Theory Courses - 42 (35Foundation and Core + 6 Professional Electives + 3 Open Elective)	2 @ 4 credits each 35 @ 3credits each 5 @ 2credits each	123
Laboratory Courses – 20	2 @ 2 credits each 18 @ 1 credits each	22
Technical Seminar	1@ 1 credit	01
Term Paper with self study report	1 @ 1credit	01
Comprehensive Assessment	1 @ 1credit	01
Project Work Phase-I	1 @ 2 credit	02
Project Work Phase-II/ Internship	1 @ 10 credits	10
TOTAL CREDITS		**160**

10.12 Course wise break-up for three year lateral entry program :

Total Theory Courses - 32 (35Foundation and Core + 6 Professional Electives + 3 Open Elective)	27 @ 3credits each 5 @ 2credits each	91
Laboratory Courses – 14	14 @ 1 credit	14
Technical Seminar	1@ 1 credit	01
Term Paper with self study report	1 @ 1credit	01
Comprehensive Assessment	1 @ 1credit	01
Project Work Phase-I	1 @ 2 credit	02
Project Work Phase-II/ Internship	1 @ 10 credits	10
TOTAL CREDITS		**120**

11.0 DIVISION OF MARKS FOR INTERNAL AND EXTERNAL ASSESSMENT

Theory	30	70
Laboratory	25	50
Technical Seminar	50	-
Term Paper	50	-
Comprehensive Assessment	100	-
Project Work Phase-I	50	50
Project Work Phase-II/ Internship	60	140

12.0 EVALUATION METHODOLOGY

The performance of a student in each semester shall be evaluated through Continuous Internal Assessment (CIA) and / or an Semester End Examination (SEE) conducted semester wise.

12.1 Theory Course:

The performance of a student in every theory course shall be evaluated for total of 100 marks each, of which the relative weightage for Continuous Internal Assessment and Semester End Examination shall be 30 marks and 70 marks respectively.

12.2 Practical Course:

The performance of a student in every practical course shall be evaluated for total of 75 marks each, of which the relative weightage for Continuous Internal Assessment and Semester End Examination shall be 25 marks and 50 marks respectively.

12.3 Internal Evaluation for Theory Course:

The total internal weightage for theory courses is 30 marks with the following distribution.

- 20 marks for Mid-Term Examination
- 10 marks for Assignment Test

While the first mid-term examination shall be conducted on the 50% of the syllabus (Unit-I, Unit-II & 50% of Unit-III), the second mid-term examination shall be conducted on the remaining 50% of the syllabus (50% of Unit III, Unit-IV & Unit-V).

10 marks are allocated for assignment test (as specified by the subject teacher concerned). The first assignment should be conducted after completion of Unit-I & Unit-II for 5 marks and the second assignment should be conducted after completion of Unit-III & Unit-IV for 5 marks. The final Assignment Test marks will be the addition of these two.

Two midterm examinations each for **20 marks** with the duration of 90 minutes each will be conducted for every theory course in a semester. The midterm examination marks shall be awarded giving a weightage of 80% in the midterm examination in which the student scores better performance and 20% in the remaining midterm examination.

The final mid-term marks obtain by the addition of these two (80% + 20%).

Example: If a student scores 23 marks and 24 marks in the first and second mid-term examinations respectively, then Weighted Average Marks = 24 x 0.8 + 23 x 0.2 = 23.8, rounded to 24 Marks.

Note: The marks of any fraction shall be rounded off to the next higher mark.

12.4 Pattern of the midterm examination question paper is as follows:

- A total of two Sections (Section-I & Section-II)
- Section-I contains three one mark questions. One questions from each unit and a student has to be answered two questions (2X1=2 Marks)
- Section-II contains six questions are to be designed taking two questions from each unit (Unit wise – Either or type) of the three units.. (3X6=18 Marks)

Pattern of the Assignment Test is as follows:

- Five assignment questions are given in advance, out of which two questions given by the concerned teacher has to be answered during the assignment test
- Sum of Assignment Tests marks is considered.

Note: A student who is absent for any Mid-Term Examination/ Assignment Test, for any reason whatsoever, shall be deemed to have scored zero marks in that Mid-Term Examination/ Assignment Test and no make-up test shall be conducted.

12.5 Internal Evaluation for Practical Course:

For practical subjects there shall be a Continuous Internal Evaluation during the semester for 25 internal marks. Out of the 25 marks for internal evaluation, day-today assessment in the laboratory shall be evaluated for 10 marks and internal practical examination shall be evaluated for 15 marks conducted by the laboratory teacher concerned.

12.6 Internal Evaluation for Design/ Drawing Courses:

For the subject having design and/or drawing, (such as engineering graphics, engineering drawing, machine drawing, production drawing and building drawing) the internal marks distribution shall be 10 marks for day-to-day performance and 20 marks for Mid-Term Examinations.

12.7 Internal Evaluation for Technical Seminar:

There shall be a Technical seminar presentation in B.Tech IV Semester. A Technical Seminar shall have two components, one chosen by the student from the course work as an extension and approved by the faculty supervisor. The other component is suggested by the supervisor and can be a reproduction of the concept in any standard research paper or an extension of concept from earlier course work. A hard copy of the information on seminar topic in the form of a report is to be submitted for evaluation along with presentation. The presentation of the seminar topics shall be made before a committee consisting of Head of the department, seminar supervisor and a senior faculty member. Each Technical Seminar shall be evaluated for 50 marks. Technical Seminar component-I for 25 marks and component-II for 25 marks making total 50 marks. (**Distribution of marks for 25:** 5 marks for report, 5 marks for subject content, 10 marks for presentation and 5 marks for queries).

12.8 Internal Evaluation for Term Paper:

The Term Paper is a self study report and shall be carried out either during B.Tech VI Semester along with other lab courses. Every student will take up this term paper individually and submit a report. The scope of the term paper could be an exhaustive literature review choosing any engineering concept with reference to standard research papers or an extension of the concept of earlier course work in consultation with the term paper supervisor. The term paper reports submitted by the individual students during the B.Tech VI Semester shall be evaluated for a total of 50 marks for continuous assessment, it shall be conducted by two Examiners, one of them being term paper supervisor as Examiner-1 and an Examiner-2 nominated by the Principal from the panel of experts recommended by HOD.

12.9 Project Work:

The Project work is spread over to two semesters having Project Work Phase-I and Project Work Phase-II. Project Work Phase-I is included in B.Tech VII Semester and Project Work Phase-II in B.Tech VIII Semester as detailed below:

A student has to select topic of his Project Work based on his interest and available facilities, in the B.Tech VII semester which he will continue through B.Tech VIII semester also.

12.10 Internal Evaluation for Project Work Phase-I:

The object of Project Work Phase-I is to enable the student to take up investigative study in the broad field of his branch of Engineering, either fully theoretical/practical or involving both theoretical and practical work to be assigned by the department on an individual basis or three/four students in a group under the guidance of a supervisor/

guide. This is expected to provide a good initiation for the student(s) in R&D work.

The assignment normally includes:

- Survey and Study of published literature of on the assigned topic.
- Working out a preliminary approach to the problem relating to the assigned topic.
- Conducting preliminary analysis/ modeling/simulation/experiment/ design/ feasibility.
- Preparing a written report on the study conducted for presentation to the department.
- Final seminar presentation before Project Review Committee.

The supervisor/ guide will evaluate the execution of the project periodically.
Project Work Phase-I is allocated 100 marks with 2 credits. Out of 100, 25 marks are allocated for the supervisor/guide to be awarded based on periodical project reviews and submission of the report on the work done. 25 marks are allocated for the supervisor/guide and head of the department to be awarded based on seminar given by each student on the topic of the project. The other 50 marks shall be awarded on the basis of his presentation on the work done on his project by the Departmental committee comprising of Head of the Department, respective supervisor/ guide and two senior faculty of the department appointed by the Principal.
The candidate is declared to have passed in Project work Phase-I when he gets 40% marks given by the Departmental Committee and 50% marks overall.

12.11 Internal Evaluation for Project Work Phase-II:

The Project work Phase-II will be an extension of Phase-I project work. The object of Project work phase-II is to enable the student to extend further the investigative study taken up as the project in Phase-I under the guidance of the supervisor/ guide from the department.

The assignment normally includes:

- Preparing an action plan for conducting the investigation including the team work.
- In depth study of the topic assigned.
- Review and finalization of the approach to the problem relating to the assigned topic.
- Final development of product/process, testing, results, conclusions and further direction.
- Preparing a paper for conference presentation/ publication in journal if possible.
- Preparing a dissertation in the standard format for being evaluated by the department.
- Final presentation of the work done before the Project Review Committee (PRC).

Project Work Phase-II is allocated 50 internal marks. Out of 50, 25 marks are allocated for the supervisor/guide and head of the department to be evaluated based on two

seminars given by each student on the topic of the project. The other 25 marks shall be evaluated on the basis of his presentation on the work done on his project by the Departmental Committee comprising of Head of the Department, respective supervisor/ guide and two senior faculty of the department appointed by the Principal.

12.12 Internal Evaluation for Internship:

Internship course is 60 marks for continuous internal assessment and will be evaluated based on day to day assessment by concern industry.

12.13 External Evaluation for Theory Course - Semester End Examination:

The Semester End Examination in each theory subject shall be conducted for 3 hours duration at the end of the semester for 70 marks.

Pattern of the Semester End Examination question paper is as follows:

- A total of two Sections (Section-I & Section-II)
- Section-I contains five two mark questions. One question from each unit and a student has to be answered all the five questions compulsory (5X2=10 Marks)
- Section-II contains ten questions are to be designed taking two questions from each unit (Unit Wise - Either or type) of the total five units. (5X12=60 Marks)

A student has to secure not less than a minimum of 35% of marks (25 marks) exclusively at the Semester End Examinations in each of the theory subjects in which the candidate had appeared. However, the candidate shall have to secure a minimum of 40% of marks (40 marks) in both external and internal components put together to become eligible for passing in the subject.

12.14 External Evaluation for Theory Course - Semester End Examination:

The Semester End Examination in each theory subject shall be conducted for 3 hours duration at the end of the semester for 70 marks.

Pattern of the Semester End Examination question paper is as follows:

- A total of two Sections (Section-I & Section-II)
- Section-I contains five two mark questions. One question from each unit and a student has to be answered all the five questions compulsory (5X2=10 Marks)
- Section-II contains ten questions are to be designed taking two questions from each unit (Unit Wise - Either or type) of the total five units. (5X12=60 Marks)

A student has to secure not less than a minimum of 35% of marks (25 marks) exclusively at the Semester End Examinations in each of the theory subjects in which the candidate had appeared. However, the candidate shall have to secure a minimum of 40% of marks (40 marks) in both external and internal components put together to become eligible for passing in the subject.

The emphasis on the questions is broadly based on the following criteria:

50 %	To test the objectiveness of the concept
30 %	To test the analytical skill of the concept
20 %	To test the application skill of the concept

12.15 External Evaluation for Practical Course:

Out of 50 marks **35** marks are allocated for experiment (procedure for conducting the experiment carries 15 marks & readings, calculation and result-20) and **10** marks for viva-voce examination with **5** marks for the record.

Each Semester External Lab Examination shall be evaluated by an Internal Examiner along with an External Examiner appointed by the Principal.

A candidate shall be declared to have passed in individual lab course if he secures a

minimum of 50% aggregate marks (38 marks) (Internal & Semester External Examination marks put together), subject to a minimum of 50% marks (25 marks) in the semester external examination.

12.16 External Evaluation for Project Work Phase-II:

The Semester End Examination for project work done during VII Semester and VIII Semester for 140 marks shall be conducted by a Project Review Committee (PRC). The committee comprises of an External Examiner appointed by the Principal, Head of the Department and Project Guide/Supervisor. The evaluation of project work shall be conducted at the end of the VIII Semester. The above committee evaluates the project work report with weightages of 50% of the marks (50 marks) awarded by external examiner, 20% of marks (20 marks) awarded by HOD & 30% of the marks (30 marks) by Project Guide/Supervisor respectively for a total of 100marks. Of the 40 marks for Presentation & Viva-Voce examination, HOD evaluates for 10 marks and external examiner for 30 marks. The evaluation of 140 marks is distributed as given below:

Distribution of Project Work Marks

Sl. No.	Criterion	Marks
1	Report	100
2	Presentation & Viva – Voce	40

A candidate shall be declared to have passed in project work phase-II if he secures a minimum of 50% aggregate marks (100 marks) (Internal & Semester External Examination marks put together), subject to a minimum of 50% marks (70 marks) in the project work phase-II end examination.

12.17 Massive Open Online Courses (MOOCs):

Meeting with the global requirements, to inculcate the habit of self learning and incompliance with UGC guidelines, MOOC (Massive Open Online Course) courses have been introduced as electives. The main intension to introduce MOOCs is to obtain enough exposure through online tutorials, self-learning at one's own pace, attempt quizzes, discuss with professors from various universities and finally to obtain certificate of completion for the course from the MOOCs providers

Regulations for MOOCs

- The respective departments shall give a list from NPTEL or any other standard providers, whose credentials are endorsed by the HOD.
- Each department shall appoint Coordinators/Mentors and allot the students to them who shall be responsible to guide students in selecting online courses and provide guidance for the registration, progress and completion of the same.
- A student shall choose an online course (relevant to his/her programme of study) from the given list of MOOCs providers, as endorsed by the teacher concerned, with the approval of the HOD.
- The details of MOOC(s) shall be displayed in Grade card of a student, provided he/she submits the proof of completion of it to the department concerned through the Coordinator/Mentor.
- Student can get certificate from SWAYAM/NPTEL or any other standard providers, whose credentials are endorsed by the HOD. The course work should not be less than 12 weeks or student may appear for end examination conducted

by the Institute.

- There shall be one Mid Continuous Internal Examination (Quiz exam for 40 marks) after 9 weeks of the commencement of the course and semester end examination (Descriptive exam for 60 marks) shall be done along with the other regular courses.

Three credits will be awarded upon successful completion of each MOOC courses having minimum of 8 weeks duration.

12.18 Internship:

The total internal weightage for internship course is 60 marks and will be evaluated based on day to day assessment by concern industry.

The external examination shall be evaluated by the two senior faculties (i.e one faculty act as external examiner and other one as internal examiner) for 140 marks based on the his/her report and presentation.

12.19 Full Semester Internship:

Full Semester Internship programme carries 10 credits. During Internship, student has to spend one full semester in an identified industry /firm / organization and has to carry out the internship as per the stipulated guidelines of that industry / firm / organization and the institute.

Following are the evaluation guidelines:

- Profile and abstract –Student has to submit the industry profile and abstract of the project within four weeks from date of commencement of internship through mail or post.

Weightage: 10%.

- Seminar 1 -at 9th week from date of commencement of internship - weightage: 10%
- Seminar 2 -Pre submission at 17th week from date of commencement of internship– Weightage: 10%
- Internship Diary, weightage: 15 %
- Project Report, weightage: 15%
- Viva-voce & Final Presentation, weightage: 40%

The internship shall be evaluated for 200 marks out of which 60 marks for internal evaluation and 140 marks for external evaluation.

The external evaluation based on the report submitted and viva-voce exam for 140 marks by a committee comprising the HOD, Project supervisor and external examiner (Industry/ Academia).A minimum of 60% of maximum marks shall be obtained to earn the corresponding credits.

FSI shall be open to all the branches in the VII semester. The selection procedure is:

- Choice of the students

CGPA (> 7.5) upto IV semester with no current arrears and maintains the CGPA of 7.5 till VI Semester

13.0 GRADING PROCEDURE

Grades will be awarded to indicate the performance of students in each theory subject, laboratory / practicals, Technical Seminar, Term Paper, Project Work Phase-I, Comprehensive Assessment and Project Work Phase-II. Based on the percentage of marks obtained (Continuous Internal Evaluation plus Semester End Examination, both taken together) as specified in item 11 above, a corresponding letter grade shall be given.

13.1 As a measure of the performance of a student, a 10-point absolute grading system using the following letter grades (as per UGC/AICTE guidelines) and corresponding percentage of marks shall be followed:

% of Marks Secured in a Subject/Course (Class Intervals)	Letter Grade (UGC Guidelines)	Grade Points
Greater than or equal to 90%	S (Superior)	10
80 and less than 90%	A (Excellent)	9
70 and less than 80%	B (Very Good)	8
60 and less than 70%	C (Good)	7
50 and less than 60%	D (Average)	6
40 and less than 50%	E (Pass)	5
Below 40%	F (FAIL)	0
Absent	AB	0

13.2 A student who has obtained an 'F' grade in any subject shall be deemed to have 'failed' and is required to reappear as a 'supplementary student' in the semester end examination, as and when offered. In such cases, internal marks in those subjects will remain the same as those obtained earlier

13.3 To a student who has not appeared for an examination in any subject, 'Ab' grade will be allocated in that subject, and he is deemed to have 'failed'. A student will be required to reappear as a 'supplementary student' in the semester end examination, as and when offered next. In this case also, the internal marks in those subjects will remain the same as those obtained earlier.

13.4 A letter grade does not indicate any specific percentage of marks secured by the student, but it indicates only the range of percentage of marks.

13.5 A student earns grade point (GP) in each subject/ course, on the basis of the letter grade secured in that subject/ course. The corresponding 'credit points' (CP) are computed by multiplying the grade point with credits for that particular subject/ course.
Credit points (CP) = grade point (GP) x credits .... For a course

13.6 A student passes the subject/ course only when GP ≥5 ('E' grade or above)

13.7

- A student obtaining Grade F shall be considered failed and will be required to reappear for that subject when the next supplementary examination offered.
- For Mandatory courses "Satisfactory" or "Unsatisfactory" shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA.

13.8 **Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):**

i. The Semester Grade Point Average (SGPA) is the ratio of sum of the product of the number of credits with 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, i.e.,

$$SGPA = \Sigma (C_i \times G_i)/\Sigma C_i$$

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

ii. The Cumulative Grade Point Average (CGPA) will be computed in the same manner taking into account all the courses undergone by a student over all the semesters of a program, i.e.,

$$CGPA = \Sigma (C_i \times S_i)/ \Sigma C_i$$

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

iii. Both SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

iv. While computing the SGPA the subjects in which the student is awarded Zero grade points will also be included.

Grade Point: It is a numerical weight allotted to each letter grade on a 10-point scale.

Letter Grade: It is an index of the performance of students in a said course. Grades are denoted by letters S, A, B, C, D, E and F.

Example: Computation of SGPA and CGPA

Illustration for SGPA

Course	Credit	Grade Letter	Grade Point	Credit Point
Course-I	3	S	10	3x10=30
Course-II	3	A	9	3x9=27
Course-III	3	B	8	3x8=24
Course-IV	3	D	6	3x6=18
Course-V	2	B	8	2x8=16
Course-VI	1	C	7	1x7=7
	15			122

Thus, SGPA=$\frac{122}{15}$ = 8.13

Illustration for CGPA

Credit: 20 SGPA: 8.13	Credit: 20 SGPA: 6.9	Credit: 20 SGPA: 7.3	Credit: 21 SGPA: 6.8
Credit: 20 SGPA: 8.2	Credit: 21 SGPA: 7.4	Credit: 19 SGPA: 7.2	Credit: 19 SGPA: 7.8

Thus, CGPA= $\frac{(20x8.13)+(20x6.9)+(20x7.3)+(21x6.8)+(20x8.2)+(21x7.2)+(19x7.2)+(19x7.8)}{160}$

= 7.461

14.0 AWARD OF CLASS

14.1 After a student has satisfied the requirement prescribed for the completion of the program and is eligible for the award of B.Tech. Degree he/she shall be placed in one of the following four classes:

CGPA ≥ 7.5	CGPA ≥ 6.5 and < 7.5	CGPA ≥ 5.0 and < 6.5	CGPA ≥ 4.0 and < 5.0	CGPA < 4.0
First Class with Distinction	**First Class**	**Second Class**	**Pass Class**	**Fail**

A student with final CGPA is < 4.00 will not be eligible for the Award of the Degree.

15.0 CONDUCT OF SEMESTER END EXAMINATIONS AND EVALUATION

15.1 Semester end examination shall be conducted by the Controller of Examinations (COE) by inviting Question Papers from the External Examiners

15.2 Question papers may be moderated for the coverage of syllabus, pattern of questions by a Semester End Examination Committee chaired by CoE and senior subject expert before the commencement of semester end examinations. Internal Examiner shall prepare a detailed scheme of valuation.

15.3 The answer papers of semester end examination should be evaluated by the first examiner immediately after the completion of exam and the award sheet should be submitted to CoE in a sealed cover before the same papers are kept for second evaluation by external examiner.

15.4 In case of difference is more than 15% of marks, the answer paper shall be re-evaluated by a third examiner appointed by the Examination Committee and the marks awarded by third examiner is compared with first and second evaluation marks and higher marks of minimum difference pair will be considered as final marks.

15.5 CoE shall invite required number of external examiners to evaluate all the end-semester answer scripts on a prescribed date(s). Practical laboratory exams are conducted involving external examiners.

15.6 Examinations Control Committee shall consolidate the marks awarded by both the examiners and award grades.

16.0 SUPPLEMENTARY EXAMINATIONS

Apart from the regular End Examinations the institute may also schedule and conduct supplementary examinations for all subjects for the benefit of students with backlogs. Such students writing supplementary examinations as supplementary candidates may have to write more than one examination per day.

17.0 ATTENDANCE REQUIREMENTS AND DETENTION POLICY

17.1 A candidate shall put in a minimum required attendance of 75 % in that semester. Otherwise, s/he shall be declared detained and has to repeat semester.

17.2 For cases of medical issues, deficiency of attendance in a semester to the extent of 10% may be condoned by the College Academic Committee (CAC) on the recommendation of Head of the department if their attendance is between 75% and 65% in a semester, subjected to submission of medical certificates, medical case file and other needful documents to the concerned departments. The condonation is permitted maximum of two times during the entire course of study.

17.3 A prescribed fee shall be payable towards condonation of shortage of attendance.

17.4 A student shall not be promoted to the next semester unless he/she satisfies the attendance requirement of the present semester, as applicable. They may seek readmission into that semester when offered next. If any candidate fulfills the attendance requirement in the present semester, he/she shall not be eligible for readmission into the same class.

17.5 Any student against whom any disciplinary action by the institute is pending shall not be permitted to attend any SEE in that semester.

18.0 PROMOTION POLICIES

The following academic requirements have to be satisfied in addition to the attendance requirements mentioned in item no. 17.

18.1 A student shall be promoted from IV Semester to V Semester only if he/she acquires 24 credits (i.e 40% of total credits) that have been studied up to III Semester from the following examinations, irrespective of whether the candidates takes the end examinations or not as per the normal course of the study

B.Tech I Semester - one Regular and two Supplementary
B.Tech II Semester - one Regular and one Supplementary
B.Tech III Semester - one Regular only

18.2 A student shall be promoted from VI Semester to VII Semester only if he/she acquires 40 credits(i.e 40% of total credits) that have been studied up to V Semester from the following examinations, irrespective of whether the candidates takes the end examinations or not as per the normal course of the study

B.Tech I Semester - one Regular and four Supplementary
B.Tech II Semester - one Regular and three Supplementary
B.Tech III Semester - one Regular and two Supplementary
B.Tech IV Semester - one Regular and one Supplementary
B.Tech V Semester - one Regular only

18.3 A student shall be promoted from VI Semester to VII Semester only if he/she acquires 24 of the credits (i.e 40% of the credits) from the courses that have been studied up to V Semester from all the regular and supplementary examinations until V Semester.

- Two regular and one supplementary examinations of III Semester.
- One regular and one supplementary examinations of IV Semester.
- One regular examination of V semester.

18.4 A student shall register and put up minimum attendance in all 120 credits and earn all the 120 credits. Marks obtained in all 120 credits shall be considered for the calculation of aggregate percentage of marks obtained.

18.5 Students who fail to earn 120 credits as indicated in the course structure within six academic years from the year of their admission shall forfeit their seat in B.Tech. Course and their admission shall stand cancelled.

19.0 GRADUATION REQUIREMENTS

The following academic requirements shall be met for the award of the B.Tech degree.

19.1 Student shall register and acquire minimum attendance in all courses and secure 160 credits for regular program and 120 credits for lateral entry program.

19.2 A student of a regular program, who fails to earn 160 credits within eight consecutive academic years from the year of his/her admission with a minimum CGPA of 4.0, shall forfeit his/her degree and his/her admission stands cancelled.

19.3 A student of a lateral entry program who fails to earn 120 credits within six consecutive academic years from the year of his/her admission with a minimum CGPA of 4.0, shall forfeit his/her degree and his/her admission stands cancelled.

20.0 REVALUATION

A student, who seeks the re-evaluation of the answer script, is directed to apply for the photocopy of his/her semester examination answer paper(s) in the theory course(s), within 5 working days from the declaration of results in the prescribed format with prescribed fee to the Controller of Examinations through the Head of the department. On receiving the photocopy, the student can consult with a competent member of faculty and seek the opinion for revaluation. Based on the recommendations, the student can register for the revaluation with prescribed fee. The Controller of Examinations shall arrange for the revaluation and declare the results. Revaluation is not permitted to the courses other than theory courses.

21.0 TEMPORARY BREAK OF STUDY FROM THE PROGRAMME

21.1 A candidate is normally not permitted to break the study. However, if a candidate intends to temporarily discontinue the program in the middle for valid reasons (such as accident or hospitalization due to prolonged ill health) and to rejoin the program after the break from the commencement of the respective semester as and when it is offered , s/he shall apply to the Principal in advance. Such application shall be submitted before the commencement of the semester in question and forwarded through the Head of the department stating the reasons for such withdrawal together with supporting documents and endorsement of his / her parent / guardian.

21.2 The institute shall examine such an application and if it finds the case to be genuine, it may permit the student to rejoin. Such permission is accorded only to those who do not have any outstanding dues like tuition fee etc.

21.3 The total period for completion of the program reckoned from the commencement of the semester to which the candidate was first admitted shall not exceed the maximum period specified in clause 19.0. The maximum period includes the break period.

22.0 TERMINATION FROM THE PROGRAMME

The admission of a student to the program may be terminated and the student is asked to leave the institute in the following circumstances:

22.1 The student fails to satisfy the requirements of the program within the maximum period stipulated for that program.

22.2 A student shall not be permitted to study any semester more than three times during the entire Program of study.

22.3 The student fails to satisfy the norms of discipline specified by the institute from time to time.

23.0 **WITH-HOLDING OF RESULTS**

If the candidate has any dues not paid to the institute or if any case of indiscipline or malpractice is pending against him/her, the result of the candidate shall be withheld and he/she will not be allowed / promoted into the next higher semester. The issue of awarding degree is liable to be withheld in such cases.

24.0 **STUDENT TRANSFERS**

Student transfers shall be as per the guidelines issued by the Government of Andhra Pradesh from time to time.

25.0 **GRADUATION DAY**

The institute shall have its own annual Graduation Day for the award of Degrees to students completing the prescribed academic requirements in each case, in consultation with the University and by following the provisions in the Statute. The college shall institute prizes and medals to meritorious students and award them annually at the Graduation Day. This will greatly encourage the students to strive for excellence in their academic work.

26.0 **CONDUCT AND DISCIPLINE**

- Students shall conduct themselves within and outside the premises of the Institute in a descent and dignified manner befitting the students of Audisankara College of Engineering & Technology.
- As per the order of the Honorable Supreme Court of India, ragging in any form is considered a criminal offence and is totally banned. Any form of ragging will be severely dealt with the following acts of omission and / or commission shall constitute gross violation of the code of conduct and are liable to invoke disciplinary measures with regard to ragging.
  - (i) Lack of courtesy and decorum; indecent behavior anywhere within or outside the college campus.
  - (ii) Damage of college property or distribution of alcoholic drinks or any kind of narcotics to fellow students / citizens.
- Possession, consumption or distribution of alcoholic drinks or any kind of narcotics or hallucinogenic drugs.
- Mutilation or unauthorized possession of library books.
- Noisy and unruly behavior, disturbing studies of fellow students.
- Hacking in computer systems (such as entering into other person's areas without

prior permission, manipulation and / or damage of computer hardware and software or any other cyber crime etc.

- Usage of camera /cell phones in the campus.
- Plagiarism of any nature.
- Any other act of gross indiscipline as decided by the college academic council from time to time.
- Commensurate with the gravity of offense, the punishment may be reprimand, fine, expulsion from the institute/ hostel, debarring from examination, disallowing the use of certain facilities of the Institute, rustication for a specified period or even outright expulsion from the Institute, or even handing over the case to appropriate law enforcement authorities or the judiciary, as required by the circumstances.
- For an offence committed in (i) a hostel (ii) a department or in a class room and (iii) elsewhere, the chief Warden, the concern Head of the Department and the Principal respectively, shall have the authority to reprimand or impose fine.
- Cases of adoption of unfair means and/ or any malpractice in an examination shall be reported to the principal for taking appropriate corrective action.
- All cases of serious offence, possibly requiring punishment other than reprimand, shall be reported to the Academic council of the college.
- The Institute Level Standing Disciplinary Action Committee constituted by the academic council shall be the authority to investigate the details of the offence, and recommend disciplinary action based on the nature and extent of the offence committed.
- The Principal shall deal with any problem, which is not covered under these rules and regulations.

27.0 GRIEVANCE REDRESSAL COMMITTEE

Grievance and Redressal Committee constituted by the Principal shall deal with all grievances pertaining to the academic / administrative / disciplinary matters. All the students must abide by the code and conduct rules prescribed by the college from time to time.

28.0 TRANSITORY REGULATIONS

required to do all the courses in the curriculum prescribed for the batch of students in which the student joins subsequently. However, exemption will be given to those candidates who have already passed such courses in the earlier semester(s) s/he was originally admitted into and substitute subjects are offered in place of them as decided by the Board of Studies. However, the decision of the Board of Studies will be final.

28.1 Four Year B.Tech Regular course:

A student who is following Jawaharlal Nehru Technological University Anantapur (JNTUA) curriculum and detained due to shortage of attendance at the end of the first semester shall join the autonomous batch of first semester. Such students shall study all the courses prescribed for the batch in which the student joins and considered on par with regular candidates of Autonomous stream and will be governed by the autonomous regulations.

A student who is following JNTUA curriculum, detained due to lack of credits or

shortage of attendance at the end of the second semester or at the subsequent semesters shall join with the autonomous batch in the appropriate semester. Such candidates shall be required to pass in all the courses in the program prescribed by the Board of Studies concerned for that batch of students from that semester onwards to be eligible for the award of degree. However, exemption will be given in the courses of the semester(s) of the batch which he had passed earlier and substitute courses will be offered in place of them as decided by the Board of Studies. The student has to clear all his backlog courses up to previous semester by appearing for the supplementary examinations conducted by JNTUA for the award of degree. The total number of credits to be secured for the award of the degree will be sum of the credits up to previous semester under JNTUA regulations and the credits prescribed for the semester in which a candidate seeks readmission and subsequent semesters under the autonomous stream. The class will be awarded based on the academic performance of a student in the autonomous pattern.

28.2 Three Year B.Tech program under Lateral Entry Scheme:

A student who is following JNTUA curriculum and detained due to shortage of attendance at the end of the first semester of second year shall join the autonomous batch of third semester. Such students shall study all the courses prescribed for the batch in which the student joins and considered on par with Lateral Entry regular candidates of Autonomous stream and will be governed by the autonomous regulations.

A student who is following JNTUA curriculum, detained due to lack of credits or shortage of attendance at the end of the second semester of second year or at the subsequent semesters shall join with the autonomous batch in the appropriate semester. Such candidates shall be required to pass in all the courses in the program prescribed by the Board of Studies concerned for that batch of students from that semester onwards to be eligible for the award of degree. However, exemption will be given in the courses of the semester(s) of the batch which he had passed earlier and substitute courses are offered in place of them as decided by the Board of Studies. The student has to clear all his backlog courses up to previous semester by appearing for the supplementary examinations conducted by JNTUA for the award of degree. The total number of credits to be secured for the award of the degree will be sum of the credits up to previous semester under JNTUA regulations and the credits prescribed for the semester in which a candidate seeks readmission and subsequent semesters under the autonomous status. The class will be awarded based on the academic performance of a student in the autonomous pattern.

28.3 Transfer candidates (from non-autonomous college affiliated to JNTUA):

A student who is following JNTUA curriculum, transferred from other college to this institute in third semester or subsequent semesters shall join with the autonomous batch in the appropriate semester. Such candidates shall be required to pass in all the courses in the program prescribed by the Board of Studies concerned for that batch of students from that semester onwards to be eligible for the award of degree. However, exemption will be given in the courses of the semester(s) of the batch which he had passed earlier and substitute courses are offered in their place as decided by the Board of Studies. The student has to clear all his backlog courses up to previous semester by appearing for the supplementary examinations conducted by JNTUA for the award of degree. The total number of credits to be secured for the award of the degree will be the sum of the credits upto previous semester under JNTUA regulations and the credits prescribed for the semester in which a candidate joined after transfer and subsequent semesters under the autonomous status. The class will be awarded based on the academic performance of a student in the autonomous pattern.

28.4 Transfer candidates (from an autonomous college affiliated to JNTUA):

A student who has secured the required credits upto previous semesters as per the regulations of other autonomous institutions shall also be permitted to be transferred to this institute. A student who is transferred from the other autonomous colleges to this

institute in third semester or subsequent semesters shall join with the autonomous batch in the appropriate semester. Such candidates shall be required to pass in all the courses in the program prescribed by the Board of Studies concerned for that batch of students from that semester onwards to be eligible for the award of degree. However, exemption will be given in the courses of the semester(s) of the batch which he had passed earlier and substitute subjects are offered in their place as decided by the Board of Studies. The total number of credits to be secured for the award of the degree will be the sum of the credits upto previous semester as per the regulations of the college from which he is transferred and the credits prescribed for the semester in which a candidate joined after transfer and subsequent semesters under the autonomous status. The class will be awarded based on the academic performance of a student in the autonomous pattern.

29.0 REVISION OF REGULATIONS AND CURRICULUM

The Institute from time to time may revise, amend or change the regulations, scheme of examinations and syllabi if found necessary and on approval by the Academic Council and the Governing Body shall come into force and shall be binding on the students, faculty, staff, all authorities of the Institute and others concerned.

MALPRACTICES RULES

DISCIPLINARY ACTION FOR / IMPROPER CONDUCT IN EXAMINATIONS

S.No	Nature of Malpractices/Improper conduct	Punishment
	If the candidate:	
1. (a)	Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, cell phones, pager, palm computers or any other form of material concerned with or related to the subject of the examination (theory or practical) in which he is appearing but has not made use of (material shall include any marks on the body of the candidate which can be used as an aid in the subject of the examination)	Expulsion from the examination hall and cancellation of the performance in that subject only.
(b)	Gives assistance or guidance or receives it from any other candidate orally or by any other body language methods or communicates through cell phones with any candidate or persons in or outside the exam hall in respect of any matter.	Expulsion from the examination hall and cancellation of the performance in that subject only of all the candidates involved. In case of an outsider, he will be handed over to the police and a case is registered against him.
2.	Has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the subject of the examination (theory or practical) in which the candidate is appearing.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the subjects of that Semester/year. The Hall Ticket of the candidate is to be cancelled and sent to the Controller of Examinations.
3.	Impersonates any other candidate in connection with the examination.	The candidate who has impersonated shall be expelled from examination hall. The candidate is also debarred and forfeits the seat. The performance of the original candidate, who has been impersonated, shall be cancelled in all the subjects of the examination (including practicals and project work) already appeared and shall

		not be allowed to appear for examinations of the remaining subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all semester end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. If the imposter is an outsider, he will be handed over to the police and a case is registered against him.
4.	Smuggles in the Answer book or additional sheet or takes out or arranges to send out the question paper during the examination or answer book or additional sheet, during or after the examination.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all semester end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
5.	Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass marks.	Cancellation of the performance in that subject.
6.	Refuses to obey the orders of the Controller of Examinations /Additional Controller of Examinations/any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organizes a walk out or instigates others to walk out, or threatens the COE or any person on duty in or outside the examination hall of any injury to his person or to any of his relations whether by words, either spoken or written or by signs or by visible representation, assaults the COE or any person on duty in or outside the examination hall or any of his relations, or indulges in any other act of misconduct or mischief which result in damage to or destruction of	In case of students of the college, they shall be expelled from examination halls and cancellation of their performance in that subject and all other subjects the candidate(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the subjects of that semester/year. The candidates also are debarred and forfeit their seats. In case of outsiders, they will be handed over to the police and a police case is registered against them.

	property in the examination hall or any part of the Institute premises or engages in any other act which in the opinion of the officer on duty amounts to use of unfair means or misconduct or has the tendency to disrupt the orderly conduct of the examination.	
7.	Leaves the exam hall taking away answer script or intentionally tears of the script or any part thereof inside or outside the examination hall.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all semester end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
8.	Possess any lethal weapon or firearm in the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat.
9.	If student of the college, who is not a candidate for the particular examination or any person not connected with the college indulges in any malpractice or improper conduct mentioned in clause 6 to 8.	Student of the colleges expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat. Person(s) who do not belong to the College will be handed over to police and, a police case will be registered against them.

10.	Comes in a drunken condition to the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year.
11.	Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny.	Cancellation of the performance in that subject and all other subjects the candidate has appeared including practical examinations and project work of that semester/year examinations.
12.	If any malpractice is detected which is not covered in the above clauses 1 to 11 shall be reported to the University for further action to award suitable punishment.	

ITEM-V

Review and Approval of M.Tech Academic Rules and Regulations of R18 Regulations.

Resolution No : 5/ACC-7

ACC has unanimously approved M.Tech Academic Rules and Regulations of R18 Regulations with the following suggestions.

Members reviewed the M.Tech Academic Rules and Regulations of R18 Regulations as follows:

For pursuing two year postgraduate Master Degree program of study in Engineering (M.Tech) offered by Audisankara College of Engineering & Technology under Autonomous status and herein after referred to as ASCET.

1.0 CHOICE BASED CREDIT SYSTEM

The Indian Higher Education Institutions (HEI's) are changing from the conventional course structure to Choice Based Credit System (CBCS) along with introduction to semester system at first year itself. The semester system helps in accelerating the teaching-learning process and enables vertical and horizontal mobility in learning.

The credit based semester system provides flexibility in designing curriculum and assigning credits based on the course content and hours of teaching. The choice based credit system provides a 'cafeteria' type approach in which the students can take courses of their choice, learn at their own pace, undergo additional courses and acquire more than the required credits, and adopt an interdisciplinary approach to learning.

Choice Based Credit System (CBCS) is a flexible system of learning and provides choice for students to select from the prescribed elective courses. A course defines learning objectives and learning outcomes and comprises of lectures / tutorials / laboratory work / field work / project work / comprehensive Examination / seminars /

assignments / alternative assessment tools / presentations / self-study etc. or a combination of some of these.

Under the CBCS, the requirement for awarding a degree is prescribed in terms of number of credits to be completed by the students.

The CBCS permits students to:

- Choose electives from a wide range of elective courses offered by the departments.
- Undergo additional courses of interest.
- Adopt an interdisciplinary approach in learning.
- Make the best use of expertise of the available faculty.

2.0 ELIGIBILITY FOR ADMISSION

The total seats available as per the approved intake are grouped into two categories viz. category A and Category B with a ratio of 70:30 as per the state government guidelines vide G.O No.52.

2.1 The admissions for category A and B seats shall be as per the guidelines of Andhra Pradesh State Council for Higher Education (APSCHE) in consonance with government reservation policy.

- Under Category A: 70% of the seats are filled based on GATE/PGECET ranks..
- Under Category B: 30% seats are filled on merit basis as per guidelines of APSCHE.

3.0 DURATION OF PROGRAMME

The course duration for the award of the Degree in **Master of Technology** will be two academic years, with two semesters in each year. However if a student is unable to complete the course within 2 years, he/ she can do so by giving more attempts but within 4 consecutive academic years from the date of admission.

Academic Calendar

For all the four semesters a common academic calendar shall be followed in each semester by having sixteen weeks of instruction, one week for the conduct of practical exams and with three weeks for theory examinations and evaluation. Dates for registration, sessional and end semester examinations shall be notified in the academic calendar of every semester. The schedule for the conduct of all the curricular and co-curricular activities shall be notified in the planner.

4.0 MEDIUM OF INSTRCTION

The medium of instruction shall be English for all courses, examinations, seminar presentations and project work. The curriculum will comprise courses of study as given in course structure, in accordance with the prescribed syllabi.

5.0 SPECIALIZATIONS OF STUDY

- Structural Engineering (STE)
- Electrical Power Systems (EPS)
- Power Electronics (PE)
- Embedded Systems (ES)
- VLSI (VLSI)

- Computer Science & Engineering (CSE)
- Software Engineering (SE)

6.0 TYPES OF COURSES

Courses in a programme may be of four kinds: Core, Elective and Open Elective

6.1 Core Course:

There may be a core course in every semester. This is the course which is to be compulsorily studied by a student as a core requirement to complete the requirement of a programme in a said discipline of study.

6.2 Elective Course:

Electives provide breadth of experience in respective branch and applications areas. Elective course is a course which can be chosen from a pool of courses. It may be:

- Supportive to the discipline of study
- Providing an expanded scope
- Enabling an exposure to some other discipline/domain
- Nurturing student's proficiency/skill.

There shall be five professional core elective groups out of which students can choose not more than two courses from each group. Overall, students can opt for four professional elective courses which suit their project work in consultation with the faculty advisor/mentor. In addition, one course from each of the two open electives has to be selected. A student may also opt for more elective courses in his/her area of interest.

6.3 Open Elective Course:

An elective may be discipline centric focusing on those courses which add generic proficiency to the students or may be chosen from supportive/general discipline called as "Open Elective".

7.0 SEMESTER STRUCTURE

Each academic year is divided into two semesters, TWO being MAIN SEMESTERS (one odd + one even). Main Semesters are for regular class work. However, the following cases are exempted:

7.1 Students admitted on transfer from JNTUA affiliated institutes, Universities and other institutes in the subjects in which they are required to earn credits so as to be on par with regular students as prescribed by concerned 'Board of Studies'.

7.2 Each main semester shall be of 21 weeks (Table 1) duration and this period includes time for registration of courses, course work, examination preparation and conduct of examinations.

7.3 Each main semester shall have a minimum of 90 working days; out of which number of contact days for teaching / practical are 75 and 15 days for conduct of exams and preparation.

7.4 The academic calendar shown in Table 1 is declared at the beginning of the academic year.

Table 1: Academic Calendar

FIRST SEMESTER (21 weeks)	I Spell Instruction Period	8 weeks	19 weeks
	I Mid Examinations	1 week	
	II Spell Instruction Period	8 weeks	
	II Mid Examinations	1 week	
	Preparation and Practical Examinations	1 week	
	Semester End Examinations		2 weeks
Semester Break and Supplementary Examinations			2 weeks
SECOND SEMESTER (21 weeks)	I Spell Instruction Period	8 weeks	19 weeks
	I Mid Examinations	1 week	
	II Spell Instruction Period	8 weeks	
	II Mid Examinations	1 week	
	Preparation & Practical Examinations	1 week	
	Semester End Examinations		2 weeks
Summer Vacation and Supplementary Examinations			8 weeks

8.0 REGISTRATION

8.1 Each student has to compulsorily register for course work at the beginning of each semester as per the schedule mentioned in the Academic Calendar. It is absolutely compulsory for the student to register for courses in time. The registration will be organized departmentally under the supervision of the Head of the Department.

8.2 IN ABSENTIA registration will not be permitted under any circumstance.

8.3 At the time of registration, students should have cleared all the dues of Institute and Hostel in the previous semesters, paid the prescribed fees for the current semester and not been debarred from institute for a specified period on disciplinary or any other ground.

9.0 UNIQUE COURSE IDENTIFICATION CODE

Every course of the M.Tech program will be placed in one of the four groups of courses as listed in the Table 2. The various courses and their two-letter codes are given below;

Table 2: Group of Courses

1	Civil Engineering	Civil Engineering	STE
2	Electrical Power Systems	Electrical & Electronics Engineering	EPS
3	Power Electronics	Electrical & Electronics Engineering	PE
4	Embedded Systems	Electronics & Communication Engineering	ES
5	VLSI	Electronics & Communication Engineering	VL
6	Computer Science & Engineering	Computer Science & Engineering	CSE
7	Software Engineering	Computer Science & Engineering	SE

10.0 CURRICULUM AND COURSE STRUCTURE

The curriculum shall comprise Core Courses, Elective Core Courses, Laboratory Courses, Term Paper, Project Work Phase-I and Project Work Phase-II.

Each Theory and Laboratory course carries credits based on the number of hours / week as follows:

- Lecture Hours (Theory): 1 credit per lecture hour per week.
- Laboratory Hours (Practical): 1 credit for 2 practical hours, 2 credits for 3 or 4 practical hours per week.
- Project Work: 1 credit for 2 hours of project work per week.

10.1 Credit distribution for courses offered is shown in Table 3.

Table 3: Credit distribution

1	**Courses**	**4**	**4**
2	**sional Core Elective Courses**	**4**	**4**
3	**atory Courses**	**4**	**2**
4	**Elective Courses**	**4**	**4**
5	**Paper**	**4**	**2**
6	**C Courses**	**4**	**4**
7	**t Work Phase-I**	**20**	**10**
8	**t Work Phase-II**	**32**	**16**

10.2 For two year regular programme :

M.Tech I Semester	2 Core + Elective-I + Elective-II + Research Methodology & IPR	2	22
M.Tech II Semester	2 Core + Elective-III + Elective-IV	2 + Term Paper	22
MTech III Semester	Open Elective + Elective-V	Project Work Phase-I	18
M.Tech IV Semester	0	Project Work Phase-II	16
Total	4 Core + Elective-I + Elective-II + Research Methodology & IPR + Elective-III + Elective-IV + Open Elective + Elective-V	4 + Term Paper + Project Work Phase-I + Project Work Phase-II	78

10.3 Course wise break-up for Regular program:

Total Theory Courses (10) Core Courses (04)+Professional Core Electives (05) + Open Electives (01)	4 @ 4credits + 05 @ 4 credits + 01@ 4 credits	40
Laboratory Courses – 4	4 @ 2 credits each	8
Research Methodology and IPR	1@ 2 credits	2
Term Paper with self study report	1 @ 1credit	2
Project Work Phase-I	1 @ 10 credit	10
Project Work Phase-II	1 @ 16 credits	16
TOTAL CREDITS		**78**

11.0 DIVISION OF MARKS FOR INTERNAL AND EXTERNAL ASSESSMENT

Name of the Course	Continuous Internal Assessment (CIA)	Semester End Examination (SEE)
Theory	40	60
Laboratory	25	50
Term Paper	50	-
Project Work Phase-I	Grade	
Project Work Phase-II	Grade	

12.0 EVALUATION METHODOLOGY

The performance of a student in each semester shall be evaluated through Continuous Internal Assessment (CIA) and / or an Semester End Examination (SEE) conducted semester wise.

12.1 Theory Course:

The performance of a student in every theory course shall be evaluated for total of 100 marks each, of which the relative weightage for Continuous Internal Assessment and Semester End Examination shall be 40 marks and 60 marks respectively.

12.2 Practical Course:

The performance of a student in every practical course shall be evaluated for total of 75 marks each, of which the relative weightage for Continuous Internal Assessment and Semester End Examination shall be 25 marks and 50 marks respectively.

12.3 Internal Evaluation for Theory Course:

The total internal weightage for theory courses is 40 marks with the following distribution.

- 30 marks for Mid-Term Examination
- 10 marks for Assignment Test

While the first mid-term examination shall be conducted on the 50% of the syllabus (Unit-I, Unit-II, & 50% of Unit-III), the second mid-term examination shall be conducted on the remaining 50% of the syllabus (50 % of Unit III, Unit-IV & Unit-V).

10 marks are allocated for assignment test (as specified by the subject teacher

concerned). The first assignment should be conducted after completion of Unit-I & II for 5 marks and the second assignment should be conducted after completion of Unit-III & IV for 5 marks. The final Assignment Test marks will be the addition of these two.

Two midterm examinations each for **30 marks** with the duration of 90 minutes each will be conducted for every theory course in a semester. The midterm examination marks shall be awarded giving a weightage of 80% in the midterm examination in which the student scores better performance and 20% in the remaining midterm examination.

The final mid-term marks obtain by the addition of these two (80% + 20%).

Example: If a student scores 33 marks and 34 marks in the first and second mid-term examinations respectively, then Weighted Average Marks = 34 x 0.8 + 33 x 0.2 = 33.8, rounded to 34 Marks.

Note: The marks of any fraction shall be rounded off to the next higher mark.

12.4 Pattern of the midterm examination question paper is as follows:

- A total of three questions
- Question paper contains six questions are to be designed taking three questions from each unit (Unit Wise - Either or type) of the three units. (3X10=30 Marks)

Pattern of the Assignment Test is as follows:

- Five assignment questions are given in advance, out of which two questions given by the concerned teacher has to be answered during the assignment test
- Sum of Assignment Tests marks is considered.

Note: A student who is absent for any Mid-Term Examination/ Assignment Test, for any reason whatsoever, shall be deemed to have scored zero marks in that Mid-Term Examination/ Assignment Test and no make-up test shall be conducted.

12.5 Internal Evaluation for Practical Course:

For practical subjects there shall be a Continuous Internal Evaluation during the semester for 25 internal marks. Out of the 25 marks for internal evaluation, day-today assessment in the laboratory shall be evaluated for 10 marks and internal practical examination shall be evaluated for 15 marks conducted by the laboratory teacher concerned.

12.6 Internal Evaluation for Term Paper:

The Term Paper is a self study report and shall be carried out either during II semester along with other lab courses. Every student will take up this term paper individually and submit a report. The scope of the term paper could be an exhaustive literature review choosing any engineering concept with reference to standard research papers or an extension of the concept of earlier course work in consultation with the term paper supervisor. The term paper reports submitted by the individual students during the II semester shall be evaluated for a total of 50 marks for continuous assessment; it shall be conducted by two Examiners, one of them being term paper supervisor as internal examiner and an external examiner nominated by the Principal from the panel of experts recommended by HOD.

12.7 Project Work:

The Project work is spread over to two semesters having Project Work Phase-I and Project Work Phase-II. Project Work Phase-I is included in III Semester and Project Work Phase-II in IV Semester as detailed below:

A student has to select topic of his Project Work based on his interest and available facilities, in the III semester which he will continue through IV semester also.

12.8 External Evaluation for Theory Course - Semester End Examination:

The Semester End Examination in each theory subject shall be conducted for 3 hours duration at the end of the semester for 60 marks.

Pattern of the Semester End Examination question paper is as follows:

- Question Paper contains ten questions are to be designed taking two questions from each unit (Unit Wise - Either or type) of the total five units. (5X12=60 Marks)

A student has to secure not less than a minimum of 40% of marks (24 marks) exclusively at the Semester End Examinations in each of the theory subjects in which the candidate had appeared. However, the candidate shall have to secure a minimum of 50% of marks (50 marks) in both external and internal components put together to become eligible for passing in the subject.

The emphasis on the questions is broadly based on the following criteria:

50 %	To test the objectiveness of the concept
30 %	To test the analytical skill of the concept
20 %	To test the application skill of the concept

12.9 External Evaluation for Practical Course:

Out of 50 marks **35** marks are allocated for experiment (procedure for conducting the experiment carries 15 marks & readings, calculation and result-20) and **10** marks for viva-voce examination with **5** marks for the record.

Each Semester External Lab Examination shall be evaluated by an Internal Examiner along with an External Examiner appointed by the Principal.

A candidate shall be declared to have passed in individual lab course if he secures a minimum of 50% aggregate marks (38 marks) (Internal & Semester External Examination marks put together), subject to a minimum of 50% marks (25 marks) in the semester external examination.

12.10 External Evaluation for Project Work Phase-I:

Every candidate shall be required to submit thesis or dissertation after taking up a topic approved by the college/ concerned department.

- **Registration of Project work**: A candidate is permitted to register for the project work phase-I after satisfying the attendance requirement of all the courses (theory and practical courses of I & II Semesters).
- An Internal Departmental Committee (I.D.C) consisting of HOD, Supervisor/ Guide and one Internal senior expert shall monitor the progress of the project work.
- The work on the project work phase-I shall be initiated in the III semester and continued in the final semester. The candidate can submit Project work phase-I dissertation with the approval of I.D.C. after 18 weeks from the date of registration at the earliest from the date of registration for the project work phase-I.
- The student must submit status report at least in three different phases during the project work period. These reports must be approved by the I.D.C before submission of the Project Report.
- Three copies of the Dissertation certified in the prescribed form by the supervisor and HOD shall be submitted to the HOD.

- The semester end examination for project work phase-I done during III Semester, shall be conducted by a Project Review Committee (PRC). The evaluation of project work shall be conducted at the end of the III Semester.
- The PRC comprises of an External examiner appointed by the Principal, Head of the Department and Project Guide/Supervisor to adjudicate the dissertation. The PRC shall jointly evaluate candidates work and award grades as given below.

S.No	Description	Grade	Grade Point (GP) Assigned
1	Very Good	Grade A	10
2	Good	Grade B	9
3	Satisfactory	Grade C	8
4	Not satisfactory	Grade D	0

If the report of the viva-voce is not satisfactory (Grade D) the candidate will retake the viva-voce examination after three months. If he fails to get a satisfactory report at the second viva-voce examination he will not be eligible for the award of the degree unless the candidate is permitted to revise and resubmit the dissertation.

12.11 External Evaluation for Project Work Phase-II:

Every candidate shall be required to submit thesis or dissertation after taking up a topic approved by the college/ concerned department.

- **Registration of Project work**: A candidate is permitted to register for the project work phase-I after satisfying the attendance requirement of all the courses (theory and practical courses of I & II Semesters)
- An Internal Departmental Committee (I.D.C) consisting of HOD, Supervisor/ Guide

  and one Internal senior expert shall monitor the progress of the project work.
- The work on the project work phase-II shall be initiated in the IV semester. The candidate can submit Project work phase-II dissertation with the approval of I.D.C. after 18 weeks from the date of registration at the earliest from the date of registration for the project work phase-I.
- The student must submit status report at least in three different phases during the project work period. These reports must be approved by the I.D.C before submission of the Project Report.
- Three copies of the Dissertation certified in the prescribed form by the supervisor and HOD shall be submitted to the HOD.
- The semester end examination for project work phase-I done during III Semester, shall be conducted by a Project Review Committee (PRC). The evaluation of project work shall be conducted at the end of the IV Semester.
- The PRC comprises of an External examiner appointed by the Principal, Head of the Department and Project Guide/Supervisor to adjudicate the dissertation. The PRC shall jointly evaluate candidates work and award grades as given below

S.No	Description	Grade	Grade Point (GP) Assigned
1	Very Good	Grade A	10
2	Good	Grade B	9
3	Satisfactory	Grade C	8
4	Not satisfactory	Grade D	0

If the report of the viva-voce is not satisfactory (Grade D) the candidate will retake the viva-voce examination after three months. If he fails to get a satisfactory report at the second viva-voce examination he will not be eligible for the award of the degree unless the candidate is permitted to revise and resubmit the dissertation.

12.12 Massive Open Online Courses (MOOCs):

Meeting with the global requirements, to inculcate the habit of self learning and incompliance with UGC guidelines, MOOC (Massive Open Online Course) courses have been introduced as electives. The main intension to introduce MOOCs is to obtain enough exposure through online tutorials, self-learning at one's own pace, attempt quizzes, discuss with professors from various universities and finally to obtain certificate of completion for the course from the MOOCs providers.

Regulations for MOOCs

- The respective departments shall give a list from NPTEL or any other standard providers, whose credentials are endorsed by the HOD.
- Each department shall appoint Coordinators/Mentors and allot the students to them who shall be responsible to guide students in selecting online courses and provide guidance for the registration, progress and completion of the same.
- A student shall choose an online course (relevant to his/her programme of study) from the given list of MOOCs providers, as endorsed by the teacher concerned, with the approval of the HOD.
- The details of MOOC(s) shall be displayed in Grade card of a student, provided he/she submits the proof of completion of it to the department concerned through the Coordinator/Mentor.
- Student can get certificate from SWAYAM/NPTEL or any other standard providers, whose credentials are endorsed by the HOD. The course work should not be less than 12 weeks or student may appear for end examination conducted by the Institute.
- There shall be one Mid Continuous Internal Examination (Quiz exam for 40 marks) after 9 weeks of the commencement of the course and semester end examination (Descriptive exam for 60 marks) shall be done along with the other regular courses.

Three credits will be awarded upon successful completion of each MOOC courses having minimum of 8 weeks duration.

12.13 Re-Registration For Improvement of Internal Evaluation Marks:

Following are the conditions to avail the benefit of improvement of internal evaluation marks.

- The candidate should have completed the course work and obtained examinations results for I, II & III semesters.
- He should have passed all the subjects for which the internal evaluation marks secured are more than 50%.
- Out of the subjects the candidate has failed in the examination due to Internal evaluation marks secured being less than 50%, the candidate shall be given one more chance for each Theory subject and for a maximum of **three** Theory subjects for Improvement of Internal evaluation marks.
- The candidate has to re-register for the subjects so chosen and fulfill all the academic requirements.
- For each subject, the candidate has to pay a fee equivalent to one third of the semester tuition fee and the amount is to be remitted in the form of D.D. in favour

of **'The Principal, Audisankara College of Engineering & Technology' payable at Gudur** along with the requisition through the Controller of the Examinations of the college.

In the event of availing the Improvement of Internal evaluation marks, the internal evaluation marks as well as the End Examinations marks secured in the previous attempt(s) for the reregistered subjects stand cancelled

13.0 GRADING PROCEDURE

Grades will be awarded to indicate the performance of students in each theory subject, laboratory / practicals, Term Paper, Project Work Phase-I and Project Work Phase-II. Based on the percentage of marks obtained (Continuous Internal Evaluation plus Semester End Examination, both taken together) as specified in item 11 above, a corresponding letter grade shall be given.

13.1 As a measure of the performance of a student, a 10-point absolute grading system using the following letter grades (as per UGC/AICTE guidelines) and corresponding percentage of marks shall be followed:

91-100	S (Superior)	10
81-90	A (Excellent)	9
70-80	B (Very Good)	8
60-69	C (Good)	7
55-59	D (Average)	6
50-54	E (Pass)	5
<50	F (FAIL)	0
Ab (Absent)	Ab	0

13.2 A student who has obtained an 'F' grade in any subject shall be deemed to have 'failed' and is required to reappear as a 'supplementary student' in the semester end examination, as and when offered. In such cases, internal marks in those subjects will remain the same as those obtained earlier

13.3 To a student who has not appeared for an examination in any subject, 'Ab' grade will be allocated in that subject, and he is deemed to have 'failed'. A student will be required to reappear as a 'supplementary student' in the semester end examination, as and when offered next. In this case also, the internal marks in those subjects will remain the same as those obtained earlier.

13.4 A letter grade does not indicate any specific percentage of marks secured by the student, but it indicates only the range of percentage of marks.

13.5 A student earns grade point (GP) in each subject/ course, on the basis of the letter grade secured in that subject/ course. The corresponding 'credit points' (CP) are computed by multiplying the grade point with credits for that particular subject/ course.

Credit points (CP) = grade point (GP) x credits .... For a course

13.6 A student passes the subject/ course only when GP ≥5 ('E' grade or above)

13.7
- A student obtaining Grade F shall be considered failed and will be required to reappear for that subject when the next supplementary examination offered.
- For Mandatory courses "Satisfactory" or "Unsatisfactory" shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA.

13.8 **Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):**

i. The Semester Grade Point Average (SGPA) is the ratio of sum of the product of the number of credits with 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, i.e.,

$$SGPA = \Sigma (C_i \times G_i)/\Sigma C_i$$

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

The Cumulative Grade Point Average (CGPA) will be computed in the same manner taking into account all the courses undergone by a student over all the semesters of a program, i.e.,

$$CGPA = \Sigma (C_i \times S_i)/ \Sigma C_i$$

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

v. Both SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

vi. While computing the SGPA the subjects in which the student is awarded Zero grade points will also be included.

Grade Point: It is a numerical weight allotted to each letter grade on a 10-point scale.

Letter Grade: It is an index of the performance of students in a said course. Grades are denoted by letters S, A, B, C, D, E and F.

Example: Computation of SGPA and CGPA

Illustration for SGPA

Course-I	3	S	10	3x10=30
Course-II	3	A	9	3x9=27
Course-III	3	B	8	3x8=24
Course-IV	3	D	6	3x6=18
Course-V	2	B	8	2x8=16
Course-VI	1	C	7	1x7=7
	15			122

Thus, SGPA=$\frac{122}{15}$ = 8.13

Illustration for CGPA

Credit: 22 SGPA: 8.13	Credit: 22 SGPA: 6.9	Credit: 18 SGPA: 7.3	Credit: 16 SGPA: 6.8

Thus, CGPA=$\frac{(22x8.13)+(22x6.9)+(18x7.3)+(16x6.8)}{78}$

= 7.318

14.0 AWARD OF CLASS

14.1 After a student has satisfied the requirement prescribed for the completion of the program and is eligible for the award of M.Tech. Degree he/she shall be placed in one of the following four classes:

CGPA ≥ 7.5	CGPA ≥ 6.5 and < 7.5	CGPA ≥ 5.5 and < 6.5	CGPA ≥ 5.0 and < 5.5	CGPA < 5.0
First Class with Distinction	**First Class**	**Second Class**	**Pass Class**	**Fail**

A student with final CGPA is < 5.00 will not be eligible for the Award of the Degree.

15.0 CONDUCT OF SEMESTER END EXAMINATIONS AND EVALUATION

15.1 Semester end examination shall be conducted by the Controller of Examinations (COE) by inviting Question Papers from the External Examiners

15.2 Question papers may be moderated for the coverage of syllabus, pattern of questions by a Semester End Examination Committee chaired by CoE and senior subject expert before the commencement of semester end examinations. Internal Examiner shall prepare a detailed scheme of valuation.

15.3 The answer papers of semester end examination should be evaluated by the first examiner immediately after the completion of exam and the award sheet should be submitted to CoE in a sealed cover before the same papers are kept for second evaluation by external examiner.

15.4 In case of difference is more than 15% of marks, the answer paper shall be re-evaluated by a third examiner appointed by the Examination Committee and the marks awarded by third examiner is compared with first and second evaluation marks and higher marks of minimum difference pair will be considered as final marks.

15.5 CoE shall invite required number of external examiners to evaluate all the end-semester answer scripts on a prescribed date(s). Practical laboratory exams are conducted involving external examiners.

15.6 Examinations Control Committee shall consolidate the marks awarded by both the examiners and award grades.

16.0 SUPPLEMENTARY EXAMINATIONS

Apart from the regular End Examinations the institute may also schedule and conduct supplementary examinations for all subjects for the benefit of students with backlogs. Such students writing supplementary examinations as supplementary candidates may have to write more than one examination per day.

17.0 ATTENDANCE REQUIREMENTS AND DETENTION POLICY

17.1 A candidate shall put in a minimum required attendance of 75 % in that semester. Otherwise, s/he shall be declared detained and has to repeat semester.

17.2 For cases of medical issues, deficiency of attendance in a semester to the extent of 10% may be condoned by the College Academic Committee (CAC) on the recommendation of Head of the department if their attendance is between 75% and 65% in a semester, subjected to submission of medical certificates, medical case file and other needful documents to the concerned departments. The condonation is permitted maximum of two times during the entire course of study.

17.3 A prescribed fee shall be payable towards condonation of shortage of attendance.

17.4 A student shall not be promoted to the next semester unless he/she satisfies the attendance requirement of the present semester, as applicable. They may seek readmission into that semester when offered next. If any candidate fulfills the attendance requirement in the present semester, he/she shall not be eligible for readmission into the same class.

17.5 Any student against whom any disciplinary action by the institute is pending shall not be permitted to attend any SEE in that semester.

18.0 PROMOTION POLICIES

The following academic requirements have to be satisfied in addition to the attendance requirements mentioned in item no. 17.

18.1 A student shall register and put up minimum attendance in all 78 credits and earn all the 78 credits. Marks obtained in all 78 credits shall be considered for the calculation of aggregate percentage of marks obtained.

19.0 GRADUATION REQUIREMENTS

The following academic requirements shall be met for the award of the M.Tech degree.

19.1 Student shall register and acquire minimum attendance in all courses and secure 78 credits for regular program and 78 credits for lateral entry program.

19.2 A student of a regular program, who fails to earn 78 credits within eight consecutive academic years from the year of his/her admission with a minimum CGPA of 5.0, shall forfeit his/her degree and his/her admission stands cancelled.

20.0 REVALUATION

A student, who seeks the re-evaluation of the answer script, is directed to apply for the photocopy of his/her semester examination answer paper(s) in the theory course(s), within 5 working days from the declaration of results in the prescribed format with prescribed fee to the Controller of Examinations through the Head of the department. On receiving the photocopy, the student can consult with a competent member of faculty

and seek the opinion for revaluation. Based on the recommendations, the student can register for the revaluation with prescribed fee. The Controller of Examinations shall arrange for the revaluation and declare the results. Revaluation is not permitted to the courses other than theory courses.

21.0 TEMPORARY BREAK OF STUDY FROM THE PROGRAMME

21.1 A candidate is normally not permitted to break the study. However, if a candidate intends to temporarily discontinue the program in the middle for valid reasons (such as accident or hospitalization due to prolonged ill health) and to rejoin the program after the break from the commencement of the respective semester as and when it is offered , s/he shall apply to the Principal in advance. Such application shall be submitted before the commencement of the semester in question and forwarded through the Head of the department stating the reasons for such withdrawal together with supporting documents and endorsement of his / her parent / guardian.

21.2 The institute shall examine such an application and if it finds the case to be genuine, it may permit the student to rejoin. Such permission is accorded only to those who do not have any outstanding dues like tuition fee etc.

21.3 The total period for completion of the program reckoned from the commencement of the semester to which the candidate was first admitted shall not exceed the maximum period specified in clause 19.0. The maximum period includes the break period.

22.0 TERMINATION FROM THE PROGRAMME

The admission of a student to the program may be terminated and the student is asked to leave the institute in the following circumstances:

22.1 The student fails to satisfy the requirements of the program within the maximum period stipulated for that program.

22.2 A student shall not be permitted to study any semester more than three times during the entire Program of study.

22.3 The student fails to satisfy the norms of discipline specified by the institute from time to time.

23.0 WITH-HOLDING OF RESULTS

If the candidate has any dues not paid to the institute or if any case of indiscipline or malpractice is pending against him/her, the result of the candidate shall be withheld and he/she will not be allowed / promoted into the next higher semester. The issue of awarding degree is liable to be withheld in such cases.

24.0 STUDENT TRANSFERS

Student transfers shall be as per the guidelines issued by the Government of Andhra Pradesh from time to time.

25.0 GRADUATION DAY

The institute shall have its own annual Graduation Day for the award of Degrees to students completing the prescribed academic requirements in each case, in consultation with the University and by following the provisions in the Statute. The college shall institute prizes and medals to meritorious students and award them annually at the Graduation Day. This will greatly encourage the students to strive for excellence in their academic work.

26.0 CONDUCT AND DISCIPLINE

- Students shall conduct themselves within and outside the premises of the Institute in a descent and dignified manner befitting the students of Audisankara

College of Engineering & Technology.

- As per the order of the Honorable Supreme Court of India, ragging in any form is considered a criminal offence and is totally banned. Any form of ragging will be severely dealt with the following acts of omission and / or commission shall constitute gross violation of the code of conduct and are liable to invoke disciplinary measures with regard to ragging.

(iii) Lack of courtesy and decorum; indecent behavior anywhere within or outside the college.campus.

(iv) Damage of college property or distribution of alcoholic drinks or any kind of narcotics to fellow students / citizens.

- Possession, consumption or distribution of alcoholic drinks or any kind of narcotics or hallucinogenic drugs.
- Mutilation or unauthorized possession of library books.
- Noisy and unruly behavior, disturbing studies of fellow students.
- Hacking in computer systems (such as entering into other person's areas without prior permission, manipulation and / or damage of computer hardware and software or any other cyber crime etc.
- Usage of camera /cell phones in the campus.
- Plagiarism of any nature.
- Any other act of gross indiscipline as decided by the college academic council from time to time.
- Commensurate with the gravity of offense, the punishment may be reprimand, fine, expulsion from the institute/ hostel, debarring from examination, disallowing the use of certain facilities of the Institute, rustication for a specified period or even outright expulsion from the Institute, or even handing over the case to appropriate law enforcement authorities or the judiciary, as required by the circumstances.
- For an offence committed in (i) a hostel (ii) a department or in a class room and (iii) elsewhere, the chief Warden, the concern Head of the Department and the Principal respectively, shall have the authority to reprimand or impose fine.
- Cases of adoption of unfair means and/ or any malpractice in an examination shall be reported to the principal for taking appropriate corrective action.
- All cases of serious offence, possibly requiring punishment other than reprimand, shall be reported to the Academic council of the college.
- The Institute Level Standing Disciplinary Action Committee constituted by the academic council shall be the authority to investigate the details of the offence, and recommend disciplinary action based on the nature and extent of the offence committed.
- The Principal shall deal with any problem, which is not covered under these rules and regulations.

27.0 GRIEVANCE REDRESSAL COMMITTEE

Grievance and Redressal Committee constituted by the Principal shall deal with all grievances pertaining to the academic / administrative / disciplinary matters. All the students must abide by the code and conduct rules prescribed by the college from time to time.

28.0 TRANSITORY REGULATIONS

Required to do all the courses in the curriculum prescribed for the batch of students in which the student joins subsequently. However, exemption will be given to those candidates who have already passed such courses in the earlier semester(s) s/he was originally admitted into and substitute subjects are offered in place of them as decided by the Board of Studies. However, the decision of the Board of Studies will be final.

28.1 Two Year M.Tech Regular course:

A student who is following Jawaharlal Nehru Technological University Anantapur (JNTUA) curriculum and detained due to shortage of attendance at the end of the first semester shall join the autonomous batch of first semester. Such students shall study all the courses prescribed for the batch in which the student joins and considered on par with regular candidates of Autonomous stream and will be governed by the autonomous regulations.

A student who is following JNTUA curriculum, detained due to lack of credits or shortage of attendance at the end of the second semester or at the subsequent semesters shall join with the autonomous batch in the appropriate semester. Such candidates shall be required to pass in all the courses in the program prescribed by the Board of Studies concerned for that batch of students from that semester onwards to be eligible for the award of degree. However, exemption will be given in the courses of the semester(s) of the batch which he had passed earlier and substitute courses will be offered in place of them as decided by the Board of Studies. The student has to clear all his backlog courses up to previous semester by appearing for the supplementary examinations conducted by JNTUA for the award of degree. The total number of credits to be secured for the award of the degree will be sum of the credits up to previous semester under JNTUA regulations and the credits prescribed for the semester in which a candidate seeks readmission and subsequent semesters under the autonomous stream. The class will be awarded based on the academic performance of a student in the autonomous pattern.

28.2 Transfer candidates (from non-autonomous college affiliated to JNTUA):

A student who is following JNTUA curriculum, transferred from other college to this institute in third semester or subsequent semesters shall join with the autonomous batch in the appropriate semester. Such candidates shall be required to pass in all the courses in the program prescribed by the Board of Studies concerned for that batch of students from that semester onwards to be eligible for the award of degree. However, exemption will be given in the courses of the semester(s) of the batch which he had passed earlier and substitute courses are offered in their place as decided by the Board of Studies. The student has to clear all his backlog courses up to previous semester by appearing for the supplementary examinations conducted by JNTUA for the award of degree. The total number of credits to be secured for the award of the degree will be the sum of the credits upto previous semester under JNTUA regulations and the credits prescribed for the semester in which a candidate joined after transfer and subsequent semesters under the autonomous status. The class will be awarded based on the academic performance of a student in the autonomous pattern.

28.3 Transfer candidates (from an autonomous college affiliated to JNTUA):

A student who has secured the required credits upto previous semesters as per the regulations of other autonomous institutions shall also be permitted to be transferred to this institute. A student who is transferred from the other autonomous colleges to this institute in third semester or subsequent semesters shall join with the autonomous batch in the appropriate semester. Such candidates shall be required to pass in all the courses in the program prescribed by the Board of Studies concerned for that batch of students from that semester onwards to be eligible for the award of degree. However, exemption will be given in the courses of the semester(s) of the batch which he had passed earlier and substitute subjects are offered in their place as decided by the Board of Studies. The

total number of credits to be secured for the award of the degree will be the sum of the credits upto previous semester as per the regulations of the college from which he is transferred and the credits prescribed for the semester in which a candidate joined after transfer and subsequent semesters under the autonomous status. The class will be awarded based on the academic performance of a student in the autonomous pattern.

29.0 REVISION OF REGULATIONS AND CURRICULUM

The Institute from time to time may revise, amend or change the regulations, scheme of examinations and syllabi if found necessary and on approval by the Academic Council and the Governing Body shall come into force and shall be binding on the students, faculty, staff, all authorities of the Institute and others concerned.

MALPRACTICES RULES
DISCIPLINARY ACTION FOR / IMPROPER CONDUCT IN EXAMINATIONS

S.No	**Nature of Malpractices/Improper conduct**	**Punishment**
	If the candidate:	
1. (a)	Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, cell phones, pager, palm computers or any other form of material concerned with or related to the subject of the examination (theory or practical) in which he is appearing but has not made use of (material shall include any marks on the body of the candidate which can be used as an aid in the subject of the examination)	Expulsion from the examination hall and cancellation of the performance in that subject only.
(b)	Gives assistance or guidance or receives it from any other candidate orally or by any other body language methods or communicates through cell phones with any candidate or persons in or outside the exam hall in respect of any matter.	Expulsion from the examination hall and cancellation of the performance in that subject only of all the candidates involved. In case of an outsider, he will be handed over to the police and a case is registered against him.
2.	Has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the subject of the examination (theory or practical) in which the candidate is appearing.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the subjects of that Semester/year. The Hall Ticket of the candidate is to be cancelled and sent to the Controller of Examinations.
3.	Impersonates any other candidate in	The candidate who has impersonated shall

	connection with the examination.	be expelled from examination hall. The candidate is also debarred and forfeits the seat. The performance of the original candidate, who has been impersonated, shall be cancelled in all the subjects of the examination (including practicals and project work) already appeared and shall not be allowed to appear for examinations of the remaining subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all semester end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. If the imposter is an outsider, he will be handed over to the police and a case is registered against him.
4.	Smuggles in the Answer book or additional sheet or takes out or arranges to send out the question paper during the examination or answer book or additional sheet, during or after the examination.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all semester end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
5.	Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass marks.	Cancellation of the performance in that subject.
6.	Refuses to obey the orders of the Controller of Examinations /Additional Controller of Examinations/any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organizes a walk out or instigates others to walk out, or threatens the COE or any person on duty in or outside the examination hall of any injury to his person or to any of his relations whether by words, either	In case of students of the college, they shall be expelled from examination halls and cancellation of their performance in that subject and all other subjects the candidate(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the subjects of that semester/year. The candidates also are debarred and forfeit their seats. In case of outsiders, they will be handed over to the

	spoken or written or by signs or by visible representation, assaults the COE or any person on duty in or outside the examination hall or any of his relations, or indulges in any other act of misconduct or mischief which result in damage to or destruction of property in the examination hall or any part of the Institute premises or engages in any other act which in the opinion of the officer on duty amounts to use of unfair means or misconduct or has the tendency to disrupt the orderly conduct of the examination.	police and a police case is registered against them.
7.	Leaves the exam hall taking away answer script or intentionally tears of the script or any part thereof inside or outside the examination hall.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all semester end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
8.	Possess any lethal weapon or firearm in the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat.
9.	If student of the college, who is not a candidate for the particular examination or any person not connected with the college indulges in any malpractice or improper conduct mentioned in clause 6 to 8.	Student of the colleges expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat. Person(s) who do not belong to the College

		will be handed over to police and, a police case will be registered against them.
10.	Comes in a drunken condition to the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year.
11.	Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny.	Cancellation of the performance in that subject and all other subjects the candidate has appeared including practical examinations and project work of that semester/year examinations.
12.	If any malpractice is detected which is not covered in the above clauses 1 to 11 shall be reported to the University for further action to award suitable punishment.	

ITEM-VI

Review and Approval of MBA Academic Rules and Regulations of R18 Regulations.

Resolution No : 6/ACC-7

ACC has unanimously approved MBA Academic Rules and Regulations of R18 Regulations with the following suggestions.

For pursuing two year postgraduate Master Degree program of study in Business Management (MBA) offered by Audisankara College of Engineering & Technology under Autonomous status and herein after referred to as ASCET.

1.0 CHOICE BASED CREDIT SYSTEM

The Indian Higher Education Institutions (HEI's) are changing from the conventional course structure to Choice Based Credit System (CBCS) along with introduction to semester system at first year itself. The semester system helps in accelerating the teaching-learning process and enables vertical and horizontal mobility in learning.

The credit based semester system provides flexibility in designing curriculum and assigning credits based on the course content and hours of teaching. The choice based credit system provides a 'cafeteria' type approach in which the students can take courses of their choice, learn at their own pace, undergo additional courses and acquire more than the required credits, and adopt an interdisciplinary approach to learning.

Choice Based Credit System (CBCS) is a flexible system of learning and provides choice for students to select from the prescribed elective courses. A course defines learning objectives and learning outcomes and comprises of lectures / tutorials / laboratory work / field work / project work / comprehensive Examination / seminars / assignments / alternative assessment tools / presentations / self-study etc. or a combination of some of these.

Under the CBCS, the requirement for awarding a degree is prescribed in terms of number of credits to be completed by the students.

The CBCS permits students to:

- Choose electives from a wide range of elective courses offered by the departments.
- Undergo additional courses of interest.
- Adopt an interdisciplinary approach in learning.
- Make the best use of expertise of the available faculty.

2.0 ELIGIBILITY FOR ADMISSION

The total seats available as per the approved intake are grouped into two categories viz. category A and Category B with a ratio of 70:30 as per the state government guidelines vide G.O No.52.

2.1 The admissions for category A and B seats shall be as per the guidelines of Andhra Pradesh State Council for Higher Education (APSCHE) in consonance with government reservation policy.

- Under Category A: 70% of the seats are filled based on ICET ranks.
- Under Category B: 30% seats are filled on merit basis as per guidelines of APSCHE.

3.0 DURATION OF PROGRAMME

The course duration for the award of the Degree in **Master of Business Administration** will be two academic years, with two semesters in each year. However if a student is unable to complete the course within 2 years, he/ she can do so by giving more attempts but within 4 consecutive academic years from the date of admission.

Academic Calendar

For all the four semesters a common academic calendar shall be followed in each semester by having sixteen weeks of instruction, one week for the conduct of practical exams and with three weeks for theory examinations and evaluation. Dates for registration, sessional and end semester examinations shall be notified in the academic calendar of every semester. The schedule for the conduct of all the curricular and co-curricular activities shall be notified in the planner.

4.0 MEDIUM OF INSTRCTION

The medium of instruction shall be English for all courses, examinations, seminar presentations and project work. The curriculum will comprise courses of study as given in course structure, in accordance with the prescribed syllabi.

5.0 SPECIALIZATIONS OF STUDY

- Master of Business Administration (MBA)

6.0 TYPES OF COURSES

Courses in a programme may be of four kinds: Core and Elective.

6.1 Core Course:

There may be a core course in every semester. This is the course which is to be compulsorily studied by a student as a core requirement to complete the requirement of a programme in a said discipline of study.

6.2 Elective Course:

Electives provide breadth of experience in respective branch and applications areas. Elective course is a course which can be chosen from a pool of courses. It may be:

- Supportive to the discipline of study
- Providing an expanded scope
- Enabling an exposure to some other discipline/domain
- Nurturing student's proficiency/skill.

There shall be five professional core elective groups out of which students can choose not more than two courses from each group. Overall, students can opt for four professional elective courses which suit their project work in consultation with the faculty advisor/mentor. In addition, one course from each of the two open electives has to be selected. A student may also opt for more elective courses in his/her area of interest.

7.0 SEMESTER STRUCTURE

Each academic year is divided into two semesters, TWO being MAIN SEMESTERS (one odd + one even). Main Semesters are for regular class work. However, the following cases are exempted:

7.1 Students admitted on transfer from JNTUA affiliated institutes, Universities and other institutes in the subjects in which they are required to earn credits so as to be on par with regular students as prescribed by concerned 'Board of Studies'.

7.2 Each main semester shall be of 21 weeks (Table 1) duration and this period includes time for registration of courses, course work, examination preparation and conduct of examinations.

7.3 Each main semester shall have a minimum of 90 working days; out of which number of contact days for teaching / practical are 75 and 15 days for conduct of exams and preparation.

7.4 The academic calendar shown in Table 1 is declared at the beginning of the academic year.

Table 1: Academic Calendar

FIRST SEMESTER (21 weeks)	I Spell Instruction Period	8 weeks	19 weeks
	I Mid Examinations	1 week	
	II Spell Instruction Period	8 weeks	
	II Mid Examinations	1 week	
	Preparation and Practical Examinations	1 week	
	Semester End Examinations		2 weeks
Semester Break and Supplementary Examinations			2 weeks
SECOND SEMESTER (21 weeks)	I Spell Instruction Period	8 weeks	19 weeks
	I Mid Examinations	1 week	
	II Spell Instruction Period	8 weeks	
	II Mid Examinations	1 week	
	Preparation & Practical Examinations	1 week	
	Semester End Examinations		2 weeks
Summer Vacation and Supplementary Examinations			8 weeks

8.0 REGISTRATION

8.1 Each student has to compulsorily register for course work at the beginning of each semester as per the schedule mentioned in the Academic Calendar. It is absolutely compulsory for the student to register for courses in time. The registration will be organized departmentally under the supervision of the Head of the Department.

8.2 IN ABSENTIA registration will not be permitted under any circumstance.

8.3 At the time of registration, students should have cleared all the dues of Institute and Hostel in the previous semesters, paid the prescribed fees for the current semester and not been debarred from institute for a specified period on disciplinary or any other ground.

9.0 UNIQUE COURSE IDENTIFICATION CODE

Every course of the B.Tech program will be placed in one of the four groups of courses as listed in the Table 2. The various courses and their two-letter codes are given below;

Table 2: Group of Courses

1	Master of Business Administration	MBA

10.0 CURRICULUM AND COURSE STRUCTURE

The curriculum shall comprise Core Courses, Elective Core Courses, Laboratory Courses, Seminar, Rural Community Internship and Project Work.

Each Theory and Laboratory course carries credits based on the number of hours / week as follows:

- Lecture Hours (Theory): 1 credit per lecture hour per week.
- Laboratory Hours (Practical): 1 credit for 2 practical hours, 2 credits for 3 or 4 practical hours per week.
- Project Work: 1 credit for 2 hours of project work per week.

10.1

Credit distribution for courses offered is shown in Table 3.

Table 3: Credit distribution

1	**Courses**	**4**	**4**
2	**sional Core Elective Courses**	**4**	**4**
3	**atory Courses**	**4**	**2**
4	**Community Internship**	**8**	**4**
5	**ar**	**4**	**2**
6	**t Work Phase-I**	**20**	**10**
7	**t Work Phase-II**	**32**	**16**

10.2 For two year regular programme :

[illegible]	[illegible]	[illegible]	[illegible]
MBA I Semester	6 Core	1	26
MBA II Semester	6 Core	1	26
MBA III Semester	2 Core + Elective-I, II, III & IV	Rural Community Internship	28
MBA IV Semester	2 Core + Elective-V & VI	Seminar + Project Work	28
Total	4 Core + Elective-I + Elective-II + Research Methodology & IPR + Elective-III + Elective-IV + Open Elective + Elective-V	4 + Term Paper + Project Work Phase-I + Project Work Phase-II	108

10.3 Course wise break-up for Regular program:

Total Theory Courses (22) Core Courses (16) + Professional Core Electives (06)	22 @ 4credits	88
Laboratory Courses – 2	2 @ 2 credits each	4
Rural Community Internship	1 @ 4 credit	4
Seminar	1 @ 2 credit	2
Project Work Phase-II	1 @ 10 credits	10
TOTAL CREDITS		**108**

11.0 DIVISION OF MARKS FOR INTERNAL AND EXTERNAL ASSESSMENT

[illegible]	[illegible]	[illegible]
Theory	40	60
Laboratory	25	50
Rural Community Internship	40	60
Seminar	50	-
Project Work	80	120

12.0 EVALUATION METHODOLOGY

The performance of a student in each semester shall be evaluated through Continuous Internal Assessment (CIA) and / or an Semester End Examination (SEE) conducted semester wise.

12.1 Theory Course:

The performance of a student in every theory course shall be evaluated for total of 100 marks each, of which the relative weightage for Continuous Internal Assessment and Semester End Examination shall be 40 marks and 60 marks respectively.

12.2 Practical Course:

The performance of a student in every practical course shall be evaluated for total of 75 marks each, of which the relative weightage for Continuous Internal Assessment and Semester End Examination shall be 25 marks and 50 marks respectively.

12.3 Internal Evaluation for Theory Course:

The total internal weightage for theory courses is 40 marks with the following distribution.

- 30 marks for Mid-Term Examination
- 10 marks for Assignment Test

While the first mid-term examination shall be conducted on the 50% of the syllabus (Unit-I, Unit-II, & 50% of Unit-III), the second mid-term examination shall be conducted on the remaining 50% of the syllabus (50 % of Unit III, Unit-IV & Unit-V).

10 marks are allocated for assignment test (as specified by the subject teacher concerned). The first assignment should be conducted after completion of Unit-I & II for 5 marks and the second assignment should be conducted after completion of Unit-III & IV for 5 marks. The final Assignment Test marks will be the addition of these two.

Two midterm examinations each for **30 marks** with the duration of 90 minutes each will be conducted for every theory course in a semester. The midterm examination marks shall be awarded giving a weightage of 80% in the midterm examination in which the student scores better performance and 20% in the remaining midterm examination.

The final mid-term marks obtain by the addition of these two (80% + 20%).

Example: If a student scores 33 marks and 34 marks in the first and second mid-term examinations respectively, then Weighted Average Marks = 34 x 0.8 + 33 x 0.2 = 33.8, rounded to 34 Marks.

Note: The marks of any fraction shall be rounded off to the next higher mark.

12.4 Pattern of the midterm examination question paper is as follows:

- A total of three questions
- Question paper contains six questions are to be designed taking three questions from each unit (Unit Wise - Either or type) of the three units. (3X10=30 Marks)

Pattern of the Assignment Test is as follows:

- Five assignment questions are given in advance, out of which two questions given by the concerned teacher has to be answered during the assignment test
- Sum of Assignment Tests marks is considered.

Note: A student who is absent for any Mid-Term Examination/ Assignment Test, for any reason whatsoever, shall be deemed to have scored zero marks in that Mid-Term Examination/ Assignment Test and no make-up test shall be conducted.

12.5 Internal Evaluation for Practical Course:

For practical subjects there shall be a Continuous Internal Evaluation during the semester for 25 internal marks. Out of the 25 marks for internal evaluation, day-today assessment in the laboratory shall be evaluated for 10 marks and internal practical

examination shall be evaluated for 15 marks conducted by the laboratory teacher concerned.

12.6 Internal Evaluation for Rural Community Internship:

There shall be 60 hours duration to complete rural community internship during summer vacations. The total internal weightage for internship course is 40 marks and will be evaluated based on day to day assessment by concern industry.

12.7 Internal Evaluation for Seminar:

There shall be a seminar presentation in IV Semester. A Seminar shall have two components, one chosen by the student from the course work as an extension and approved by the faculty supervisor. The other component is suggested by the supervisor and can be a reproduction of the concept in any standard research paper or an extension of concept from earlier course work. A hard copy of the information on seminar topic in the form of a report is to be submitted for evaluation along with presentation. The presentation of the seminar topics shall be made before a committee consisting of Head of the department, seminar supervisor and a senior faculty member. Each Seminar shall be evaluated for 50 marks. Seminar component-I for 25 marks and component-II for 25 marks making total 50 marks. **(Distribution of marks for 25:** 5 marks for report, 5 marks for subject content, 10 marks for presentation and 5 marks for queries).

12.8 Internal Evaluation for Project Work:

Out of a total of 200 marks for the project work, 80 marks shall be for Internal Evaluation and 120 marks for the End Semester Examination. The End Semester Examination (viva-voce) shall be conducted by an External examiner nominated by the Principal, HOD & Supervisor as a committee. The Internal Evaluation shall be made by the departmental committee, on the basis of two seminars given by each student on the topic of his project.

12.9 External Evaluation for Theory Course - Semester End Examination:

The Semester End Examination in each theory subject shall be conducted for 3 hours duration at the end of the semester for 60 marks.

Pattern of the Semester End Examination question paper is as follows:

- Question Paper contains ten questions are to be designed taking two questions from each unit (Unit Wise - Either or type) of the total five units. (5X12=60 Marks)

A student has to secure not less than a minimum of 40% of marks (24 marks) exclusively at the Semester End Examinations in each of the theory subjects in which the candidate had appeared. However, the candidate shall have to secure a minimum of 50% of marks (50 marks) in both external and internal components put together to become eligible for passing in the subject.

The emphasis on the questions is broadly based on the following criteria:

50 %	To test the objectiveness of the concept
30 %	To test the analytical skill of the concept
20 %	To test the application skill of the concept

12.10 External Evaluation for Practical Course:

Out of 50 marks **35** marks are allocated for experiment (procedure for conducting the experiment carries 15 marks & readings, calculation and result-20) and **10** marks for viva-voce examination with **5** marks for the record.

Each Semester External Lab Examination shall be evaluated by an Internal Examiner along with an External Examiner appointed by the Principal.

A candidate shall be declared to have passed in individual lab course if he secures a minimum of 50% aggregate marks (38 marks) (Internal & Semester External

Examination marks put together), subject to a minimum of 50% marks (25 marks) in the semester external examination.

12.11 External Evaluation for Rural Community Internship:

There shall be 60 hours duration to complete summer internship during summer vacations. The total internal weightage for internship course is 40 marks and will be evaluated based on day to day assessment by concern industry.

The external examination shall be evaluated by the two senor faculties (i.e one faculty act as external examiner and other one as internal examiner) for 60 marks based on the his/her report and presentation.

12.12 External Evaluation for Project Work:

The Semester End Examination for project work done during IV Semester for 120 marks shall be conducted by a Project Review Committee (PRC).

A candidate shall be declared to have passed in project work if he secures a minimum of 50% aggregate marks (100 marks) (Internal & Semester External Examination marks put together), subject to a minimum of 50% marks (60 marks) in the project work end examination. The External examiner is appointed by the Principal.

Every candidate shall be required to submit thesis or dissertation after taking up a topic approved by the college/ institute.

- Registration of Project work: A candidate is permitted to register for the project work after satisfying the attendance requirement of all the courses (theory and practical courses of I , II and III Sem)
- An Internal Departmental Committee (I.D.C) consisting of HOD, Supervisor and one internal senior expert shall monitor the progress of the project work.
- The candidate can submit Project thesis with the approval of I.D.C. at the end of the IV semester Instruction as per the schedule. Extension of time within the total permissible limit for completing the programme is to be obtained from the Head of the Institution.
- The student must submit status report at least in two different phases during the project work period. These reports must be approved by the I.D.C before submission of the Project Report.
- The viva-voce examination may be conducted for all the candidates as per the IV semester examination schedule.
- Three copies of the Thesis / Dissertation certified in the prescribed form by the supervisor & HOD shall be presented to the H.OD.
- The HOD shall submit a panel of three experts for a maximum of every 5 students. However, the viva voce examiners will be nominated by the Principal.

12.13 Re-Registration For Improvement of Internal Evaluation Marks:

Following are the conditions to avail the benefit of improvement of internal evaluation marks.

- The candidate should have completed the course work and obtained examinations results for I, II, III & IV semesters.
- He should have passed all the subjects for which the internal evaluation marks secured are more than 50%.
- Out of the subjects the candidate has failed in the examination due to Internal evaluation marks secured being less than 50%, the candidate shall be given one more chance for each Theory subject and for a maximum of **three** Theory subjects for Improvement of Internal evaluation marks.
- The candidate has to re-register for the subjects so chosen and fulfill all the

academic requirements.

- ❖ For each subject, the candidate has to pay a fee equivalent to one third of the semester tuition fee and the amount is to be remitted in the form of D.D. in favour of **'The Principal, Audisankara College of Engineering & Technology' payable at Gudur** along with the requisition through the Controller of the Examinations of the college.
- ❖ In the event of availing the Improvement of Internal evaluation marks, the internal evaluation marks as well as the End Examinations marks secured in the previous attempt(s) for the reregistered subjects stand cancelled.

13.0 GRADING PROCEDURE

Grades will be awarded to indicate the performance of students in each theory subject, laboratory / practicals, Term Paper, Project Work Phase-I and Project Work Phase-II. Based on the percentage of marks obtained (Continuous Internal Evaluation plus Semester End Examination, both taken together) as specified in item 11 above, a corresponding letter grade shall be given.

13.1 As a measure of the performance of a student, a 10-point absolute grading system using the following letter grades (as per UGC/AICTE guidelines) and corresponding percentage of marks shall be followed:

91-100	S (Superior)	10
81-90	A (Excellent)	9
70-80	B (Very Good)	8
60-69	C (Good)	7
55-59	D (Average)	6
50-54	E (Pass)	5
<50	F (FAIL)	0
Ab (Absent)	Ab	0

13.2 A student who has obtained an 'F' grade in any subject shall be deemed to have 'failed' and is required to reappear as a 'supplementary student' in the semester end examination, as and when offered. In such cases, internal marks in those subjects will remain the same as those obtained earlier

13.3 To a student who has not appeared for an examination in any subject, 'Ab' grade will be allocated in that subject, and he is deemed to have 'failed'. A student will be required to reappear as a 'supplementary student' in the semester end examination, as and when offered next. In this case also, the internal marks in those subjects will remain the same as those obtained earlier.

13.4 A letter grade does not indicate any specific percentage of marks secured by the student, but it indicates only the range of percentage of marks.

13.5 A student earns grade point (GP) in each subject/ course, on the basis of the letter grade

secured in that subject/ course. The corresponding 'credit points' (CP) are computed by multiplying the grade point with credits for that particular subject/ course.
Credit points (CP) = grade point (GP) x credits .... For a course

13.6 A student passes the subject/ course only when GP ≥5 ('E' grade or above)

13.7

- A student obtaining Grade F shall be considered failed and will be required to reappear for that subject when the next supplementary examination offered.
- For Mandatory courses "Satisfactory" or "Unsatisfactory" shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA.

13.8 **Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):**

iii. The Semester Grade Point Average (SGPA) is the ratio of sum of the product of the number of credits with 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, i.e.,

$$SGPA = \Sigma (C_i \times G_i)/\Sigma C_i$$

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

iv. The Cumulative Grade Point Average (CGPA) will be computed in the same manner taking into account all the courses undergone by a student over all the semesters of a program, i.e.,

$$CGPA = \Sigma (C_i \times S_i)/ \Sigma C_i$$

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

vii. Both SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

viii. While computing the SGPA the subjects in which the student is awarded Zero grade points will also be included.

Grade Point: It is a numerical weight allotted to each letter grade on a 10-point scale.
Letter Grade: It is an index of the performance of students in a said course. Grades are denoted by letters S, A, B, C, D, E and F.

Example: Computation of SGPA and CGPA
Illustration for SGPA

Course-I	3	S	10	3x10=30
Course-II	3	A	9	3x9=27
Course-III	3	B	8	3x8=24
Course-IV	3	D	6	3x6=18
Course-V	2	B	8	2x8=16
Course-VI	1	C	7	1x7=7
	15			122

Thus, SGPA=$\frac{122}{15}$ = 8.13

Illustration for CGPA

Credit: 26 SGPA: 8.13	Credit: 26 SGPA: 6.9	Credit: 28 SGPA: 7.3	Credit: 28 SGPA: 6.8

Thus, CGPA=$\frac{(26x8.13)+(26x6.9)+(28x7.3)+(26x6.8)}{108}$

= 7.14

14.0 AWARD OF CLASS

14.1 After a student has satisfied the requirement prescribed for the completion of the program and is eligible for the award of MBA Degree he/she shall be placed in one of the following four classes:

CGPA ≥ 7.5	CGPA ≥ 6.5 and < 7.5	CGPA ≥ 5.5 and < 6.5	CGPA ≥ 5.0 and < 5.5	CGPA < 5.0
First Class with Distinction	**First Class**	**Second Class**	**Pass Class**	**Fail**

A student with final CGPA is < 5.00 will not be eligible for the Award of the Degree.

15.0 CONDUCT OF SEMESTER END EXAMINATIONS AND EVALUATION

15.1 Semester end examination shall be conducted by the Controller of Examinations (COE) by inviting Question Papers from the External Examiners

15.2 Question papers may be moderated for the coverage of syllabus, pattern of questions by a Semester End Examination Committee chaired by CoE and senior subject expert before the commencement of semester end examinations. Internal Examiner shall prepare a detailed scheme of valuation.

15.3 The answer papers of semester end examination should be evaluated by the first examiner immediately after the completion of exam and the award sheet should be submitted to CoE in a sealed cover before the same papers are kept for second evaluation by external examiner.

15.4 In case of difference is more than 15% of marks, the answer paper shall be re-evaluated by a third examiner appointed by the Examination Committee and the marks awarded by third examiner is compared with first and second evaluation marks and higher marks of minimum difference pair will be considered as final marks.

15.5 CoE shall invite required number of external examiners to evaluate all the end-semester answer scripts on a prescribed date(s). Practical laboratory exams are conducted involving external examiners.

15.6 Examinations Control Committee shall consolidate the marks awarded by both the examiners and award grades.

16.0 SUPPLEMENTARY EXAMINATIONS

Apart from the regular End Examinations the institute may also schedule and conduct supplementary examinations for all subjects for the benefit of students with backlogs. Such students writing supplementary examinations as supplementary candidates may have to write more than one examination per day.

17.0 ATTENDANCE REQUIREMENTS AND DETENTION POLICY

17.1 A candidate shall put in a minimum required attendance of 75 % in that semester. Otherwise, s/he shall be declared detained and has to repeat semester.

17.2 For cases of medical issues, deficiency of attendance in a semester to the extent of 10% may be condoned by the College Academic Committee (CAC) on the recommendation of Head of the department if their attendance is between 75% and 65% in a semester, subjected to submission of medical certificates, medical case file and other needful documents to the concerned departments. The condonation is permitted maximum of two times during the entire course of study.

17.3 A prescribed fee shall be payable towards condonation of shortage of attendance.

17.4 A student shall not be promoted to the next semester unless he/she satisfies the attendance requirement of the present semester, as applicable. They may seek readmission into that semester when offered next. If any candidate fulfills the attendance requirement in the present semester, he/she shall not be eligible for readmission into the same class.

17.5 Any student against whom any disciplinary action by the institute is pending shall not be permitted to attend any SEE in that semester.

18.0 PROMOTION POLICIES

The following academic requirements have to be satisfied in addition to the attendance requirements mentioned in item no. 17.

18.1 A student shall register and put up minimum attendance in all 78 credits and earn all the 78 credits. Marks obtained in all 78 credits shall be considered for the calculation of aggregate percentage of marks obtained.

19.0 GRADUATION REQUIREMENTS

The following academic requirements shall be met for the award of the M.Tech degree.

19.1 Student shall register and acquire minimum attendance in all courses and secure 78 credits for regular program and 78 credits for lateral entry program.

19.2 A student of a regular program, who fails to earn 78 credits within eight consecutive academic years from the year of his/her admission with a minimum CGPA of 5.0, shall forfeit his/her degree and his/her admission stands cancelled.

20.0 REVALUATION

A student, who seeks the re-evaluation of the answer script, is directed to apply for the photocopy of his/her semester examination answer paper(s) in the theory course(s), within 5 working days from the declaration of results in the prescribed format with prescribed fee to the Controller of Examinations through the Head of the department. On receiving the photocopy, the student can consult with a competent member of faculty and seek the opinion for revaluation. Based on the recommendations, the student can register for the revaluation with prescribed fee. The Controller of Examinations shall arrange for the revaluation and declare the results. Revaluation is not permitted to the courses other than theory courses.

21.0 TEMPORARY BREAK OF STUDY FROM THE PROGRAMME

21.1 A candidate is normally not permitted to break the study. However, if a candidate intends to temporarily discontinue the program in the middle for valid reasons (such as

accident or hospitalization due to prolonged ill health) and to rejoin the program after the break from the commencement of the respective semester as and when it is offered , s/he shall apply to the Principal in advance. Such application shall be submitted before the commencement of the semester in question and forwarded through the Head of the department stating the reasons for such withdrawal together with supporting documents and endorsement of his / her parent / guardian.

21.2 The institute shall examine such an application and if it finds the case to be genuine, it may permit the student to rejoin. Such permission is accorded only to those who do not have any outstanding dues like tuition fee etc.

21.3 The total period for completion of the program reckoned from the commencement of the semester to which the candidate was first admitted shall not exceed the maximum period specified in clause 19.0. The maximum period includes the break period.

22.0 TERMINATION FROM THE PROGRAMME

The admission of a student to the program may be terminated and the student is asked to leave the institute in the following circumstances:

22.1 The student fails to satisfy the requirements of the program within the maximum period stipulated for that program.

22.2 A student shall not be permitted to study any semester more than three times during the entire Program of study.

22.3 The student fails to satisfy the norms of discipline specified by the institute from time to time.

23.0 WITH-HOLDING OF RESULTS

If the candidate has any dues not paid to the institute or if any case of indiscipline or malpractice is pending against him/her, the result of the candidate shall be withheld and he/she will not be allowed / promoted into the next higher semester. The issue of awarding degree is liable to be withheld in such cases.

24.0 STUDENT TRANSFERS

Student transfers shall be as per the guidelines issued by the Government of Andhra Pradesh from time to time.

25.0 GRADUATION DAY

The institute shall have its own annual Graduation Day for the award of Degrees to students completing the prescribed academic requirements in each case, in consultation with the University and by following the provisions in the Statute. The college shall institute prizes and medals to meritorious students and award them annually at the Graduation Day. This will greatly encourage the students to strive for excellence in their academic work.

26.0 CONDUCT AND DISCIPLINE

- Students shall conduct themselves within and outside the premises of the Institute in a descent and dignified manner befitting the students of Audisankara College of Engineering & Technology.
- As per the order of the Honorable Supreme Court of India, ragging in any form is considered a criminal offence and is totally banned. Any form of ragging will be severely dealt with the following acts of omission and / or commission shall constitute gross violation of the code of conduct and are liable to invoke disciplinary measures with regard to ragging.

(v) Lack of courtesy and decorum; indecent behavior anywhere within or outside the college campus.

(vi) Damage of college property or distribution of alcoholic drinks or any kind of narcotics to fellow students / citizens.

- Possession, consumption or distribution of alcoholic drinks or any kind of narcotics or hallucinogenic drugs.
- Mutilation or unauthorized possession of library books.
- Noisy and unruly behavior, disturbing studies of fellow students.
- Hacking in computer systems (such as entering into other person's areas without prior permission, manipulation and / or damage of computer hardware and software or any other cyber crime etc.
- Usage of camera /cell phones in the campus.
- Plagiarism of any nature.
- Any other act of gross indiscipline as decided by the college academic council from time to time.
- Commensurate with the gravity of offense, the punishment may be reprimand, fine, expulsion from the institute/ hostel, debarring from examination, disallowing the use of certain facilities of the Institute, rustication for a specified period or even outright expulsion from the Institute, or even handing over the case to appropriate law enforcement authorities or the judiciary, as required by the circumstances.
- For an offence committed in (i) a hostel (ii) a department or in a class room and (iii) elsewhere, the chief Warden, the concern Head of the Department and the Principal respectively, shall have the authority to reprimand or impose fine.
- Cases of adoption of unfair means and/ or any malpractice in an examination shall be reported to the principal for taking appropriate corrective action.
- All cases of serious offence, possibly requiring punishment other than reprimand, shall be reported to the Academic council of the college.
- The Institute Level Standing Disciplinary Action Committee constituted by the academic council shall be the authority to investigate the details of the offence, and recommend disciplinary action based on the nature and extent of the offence committed.
- The Principal shall deal with any problem, which is not covered under these rules and regulations.

27.0 GRIEVANCE REDRESSAL COMMITTEE

Grievance and Redressal Committee constituted by the Principal shall deal with all grievances pertaining to the academic / administrative / disciplinary matters. All the students must abide by the code and conduct rules prescribed by the college from time to time.

28.0 TRANSITORY REGULATIONS

Required to do all the courses in the curriculum prescribed for the batch of students in which the student joins subsequently. However, exemption will be given to those candidates who have already passed such courses in the earlier semester(s) s/he was originally admitted into and substitute subjects are offered in place of them as decided by the Board of Studies. However, the decision of the Board of Studies will be final.

28.1 Transfer candidates (from non-autonomous college affiliated to JNTUA):

A student who is following JNTUA curriculum, transferred from other college to this institute in third semester or subsequent semesters shall join with the autonomous batch in the appropriate semester. Such candidates shall be required to pass in all the courses in the program prescribed by the Board of Studies concerned for that batch of students from that semester onwards to be eligible for the award of degree. However, exemption will be given in the courses of the semester(s) of the batch which he had passed earlier and substitute courses are offered in their place as decided by the Board of Studies. The student has to clear all his backlog courses up to previous semester by appearing for the supplementary examinations conducted by JNTUA for the award of degree. The total number of credits to be secured for the award of the degree will be the sum of the credits upto previous semester under JNTUA regulations and the credits prescribed for the semester in which a candidate joined after transfer and subsequent semesters under the autonomous status. The class will be awarded based on the academic performance of a student in the autonomous pattern.

28.2 Transfer candidates (from an autonomous college affiliated to JNTUA):

A student who has secured the required credits upto previous semesters as per the regulations of other autonomous institutions shall also be permitted to be transferred to this institute. A student who is transferred from the other autonomous colleges to this institute in third semester or subsequent semesters shall join with the autonomous batch in the appropriate semester. Such candidates shall be required to pass in all the courses in the program prescribed by the Board of Studies concerned for that batch of students from that semester onwards to be eligible for the award of degree. However, exemption will be given in the courses of the semester(s) of the batch which he had passed earlier and substitute subjects are offered in their place as decided by the Board of Studies. The total number of credits to be secured for the award of the degree will be the sum of the credits upto previous semester as per the regulations of the college from which he is transferred and the credits prescribed for the semester in which a candidate joined after transfer and subsequent semesters under the autonomous status. The class will be awarded based on the academic performance of a student in the autonomous pattern.

29.0 REVISION OF REGULATIONS AND CURRICULUM

The Institute from time to time may revise, amend or change the regulations, scheme of examinations and syllabi if found necessary and on approval by the Academic Council and the Governing Body shall come into force and shall be binding on the students, faculty, staff, all authorities of the Institute and others concerned.

MALPRACTICES RULES

DISCIPLINARY ACTION FOR / IMPROPER CONDUCT IN EXAMINATIONS

S.No	**Nature of Malpractices/Improper conduct**	**Punishment**
	If the candidate:	
1. (a)	Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, cell phones, pager, palm computers or any other form of material concerned with or related to the subject of the examination (theory or practical) in which he is appearing but has not made use of (material shall include any marks on the body of the candidate which can be used as an aid in the subject of the examination)	Expulsion from the examination hall and cancellation of the performance in that subject only.
(b)	Gives assistance or guidance or receives it from any other candidate orally or by any other body language methods or communicates through cell phones with any candidate or persons in or outside the exam hall in respect of any matter.	Expulsion from the examination hall and cancellation of the performance in that subject only of all the candidates involved. In case of an outsider, he will be handed over to the police and a case is registered against him.
2.	Has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the subject of the examination (theory or practical) in which the candidate is appearing.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the subjects of that Semester/year. The Hall Ticket of the candidate is to be cancelled and sent to the Controller of Examinations.
3.	Impersonates any other candidate in connection with the examination.	The candidate who has impersonated shall be expelled from examination hall. The candidate is also debarred and forfeits the seat. The performance of the original candidate, who has been impersonated, shall be cancelled in all the subjects of the examination (including practicals and project work) already appeared and shall not be allowed to appear for examinations of the remaining subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all semester end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. If the imposter is an outsider, he will be handed over to the police and a case is registered against

		him.
4.	Smuggles in the Answer book or additional sheet or takes out or arranges to send out the question paper during the examination or answer book or additional sheet, during or after the examination.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all semester end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
5.	Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass marks.	Cancellation of the performance in that subject.
6.	Refuses to obey the orders of the Controller of Examinations /Additional Controller of Examinations/any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organizes a walk out or instigates others to walk out, or threatens the COE or any person on duty in or outside the examination hall of any injury to his person or to any of his relations whether by words, either spoken or written or by signs or by visible representation, assaults the COE or any person on duty in or outside the examination hall or any of his relations, or indulges in any other act of misconduct or mischief which result in damage to or destruction of property in the examination hall or any part of the Institute premises or engages in any other act which in the opinion of the officer on duty amounts to use of unfair means or misconduct or has the tendency to disrupt the orderly conduct of the examination.	In case of students of the college, they shall be expelled from examination halls and cancellation of their performance in that subject and all other subjects the candidate(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the subjects of that semester/year. The candidates also are debarred and forfeit their seats. In case of outsiders, they will be handed over to the police and a police case is registered against them.
7.	Leaves the exam hall taking away answer script or intentionally tears of the script or any part thereof inside or outside the examination hall.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work

		and all semester end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
8.	Possess any lethal weapon or firearm in the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat.
9.	If student of the college, who is not a candidate for the particular examination or any person not connected with the college indulges in any malpractice or improper conduct mentioned in clause 6 to 8.	Student of the colleges expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat. Person(s) who do not belong to the College will be handed over to police and, a police case will be registered against them.
10.	Comes in a drunken condition to the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year.
11.	Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny.	Cancellation of the performance in that subject and all other subjects the candidate has appeared including practical examinations and project work of that semester/year examinations.
12.	If any malpractice is detected which is not covered in the above clauses 1 to 11 shall be reported to the University for further action to award suitable punishment.	

ITEM-VII

Review and Approval of MCA Academic Rules and Regulations of R18 Regulations.

Resolution No : 7/ACC-7

ACC has unanimously approved MCA Academic Rules and Regulations of R18 Regulations with the following suggestions.

For pursuing three year postgraduate Master Degree program of study in Computer of Applications offered by Audisankara College of Engineering & Technology under Autonomous status and herein after referred to as ASCET.

1.0 CHOICE BASED CREDIT SYSTEM

The Indian Higher Education Institutions (HEI's) are changing from the conventional course structure to Choice Based Credit System (CBCS) along with introduction to semester system at first year itself. The semester system helps in accelerating the teaching-learning process and enables vertical and horizontal mobility in learning.

The credit based semester system provides flexibility in designing curriculum and assigning credits based on the course content and hours of teaching. The choice based credit system provides a 'cafeteria' type approach in which the students can take courses of their choice, learn at their own pace, undergo additional courses and acquire more than the required credits, and adopt an interdisciplinary approach to learning.

Choice Based Credit System (CBCS) is a flexible system of learning and provides choice for students to select from the prescribed elective courses. A course defines learning objectives and learning outcomes and comprises of lectures / tutorials / laboratory work / field work / project work / comprehensive Examination / seminars / assignments / alternative assessment tools / presentations / self-study etc. or a combination of some of these.

Under the CBCS, the requirement for awarding a degree is prescribed in terms of number of credits to be completed by the students.

The CBCS permits students to:

- Choose electives from a wide range of elective courses offered by the departments.
- Undergo additional courses of interest.
- Adopt an interdisciplinary approach in learning.
- Make the best use of expertise of the available faculty.

2.0 ELIGIBILITY FOR ADMISSION

The total seats available as per the approved intake are grouped into two categories viz. category A and Category B with a ratio of 70:30 as per the state government guidelines vide G.O No.52.

2.1 The admissions for category A and B seats shall be as per the guidelines of Andhra Pradesh State Council for Higher Education (APSCHE) in consonance with government reservation policy.

- Under Category A: 70% of the seats are filled based on GATE/PGECET ranks..
- Under Category B: 30% seats are filled on merit basis as per guidelines of APSCHE.

3.0 DURATION OF PROGRAMME

The course duration for the award of the Degree in **Master of Computer Applications** will be two academic years, with two semesters in each year. However if a student is unable to complete the course within 3 years, he/ she can do so by giving more attempts but within 6 consecutive academic years from the date of admission.

Academic Calendar

For all the six semesters a common academic calendar shall be followed in each semester by having sixteen weeks of instruction, one week for the conduct of practical exams and with three weeks for theory examinations and evaluation. Dates for registration, sessional and end semester examinations shall be notified in the academic calendar of every semester. The schedule for the conduct of all the curricular and co-curricular activities shall be notified in the planner.

4.0 MEDIUM OF INSTRCTION

The medium of instruction shall be English for all courses, examinations, seminar presentations and project work. The curriculum will comprise courses of study as given in course structure, in accordance with the prescribed syllabi.

5.0 SPECIALIZATIONS OF STUDY

- Master of Computer Applications (MCA)

6.0 TYPES OF COURSES

Courses in a programme may be of four kinds: Core and Elective.

6.1 Core Course:

There may be a core course in every semester. This is the course which is to be compulsorily studied by a student as a core requirement to complete the requirement of a programme in a said discipline of study.

6.2 Elective Course:

Electives provide breadth of experience in respective branch and applications areas. Elective course is a course which can be chosen from a pool of courses. It may be:

- Supportive to the discipline of study
- Providing an expanded scope
- Enabling an exposure to some other discipline/domain
- Nurturing student's proficiency/skill.

There shall be five professional core elective groups out of which students can choose not more than two courses from each group. Overall, students can opt for four

professional elective courses which suit their project work in consultation with the faculty advisor/mentor. In addition, one course from each of the two open electives has to be selected. A student may also opt for more elective courses in his/her area of interest.

6.3 Activity Point Programme (APP):

For Activity Point Programme (APP) courses like Soft Skills Practice, Communication Skills Practice, Quantitative Aptitude and Technical Aptitude, a student has to secure 40 marks out of 100 marks (i.e 40% of the marks allotted) in the continuous internal evaluation for passing the subject/course. For **APP** courses "Satisfactory" or "Unsatisfactory" shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA.

6.4 Mandatory/ Non-credit Courses Marks/Grade:

No marks or letter grade shall be allotted for all mandatory/non-credit courses.

7.0 SEMESTER STRUCTURE

Each academic year is divided into two semesters, TWO being MAIN SEMESTERS (one odd + one even). Main Semesters are for regular class work. However, the following cases are exempted:

7.1 Students admitted on transfer from JNTUA affiliated institutes, Universities and other institutes in the subjects in which they are required to earn credits so as to be on par with regular students as prescribed by concerned 'Board of Studies'.

7.2 Each main semester shall be of 21 weeks (Table 1) duration and this period includes time for registration of courses, course work, examination preparation and conduct of examinations.

7.3 Each main semester shall have a minimum of 90 working days; out of which number of contact days for teaching / practical are 75 and 15 days for conduct of exams and preparation.

7.4 The academic calendar shown in Table 1 is declared at the beginning of the academic year.

Table 1: Academic Calendar

FIRST SEMESTER (21 weeks)	I Spell Instruction Period	8 weeks	19 weeks
	I Mid Examinations	1 week	
	II Spell Instruction Period	8 weeks	
	II Mid Examinations	1 week	
	Preparation and Practical Examinations	1 week	
	Semester End Examinations		2 weeks
Semester Break and Supplementary Examinations			2 weeks
SECOND SEMESTER (21 weeks)	I Spell Instruction Period	8 weeks	19 weeks
	I Mid Examinations	1 week	
	II Spell Instruction Period	8 weeks	
	II Mid Examinations	1 week	
	Preparation & Practical Examinations	1 week	
	Semester End Examinations		2 weeks
Summer Vacation and Supplementary Examinations			8 weeks

8.0 REGISTRATION

8.1 Each student has to compulsorily register for course work at the beginning of each semester as per the schedule mentioned in the Academic Calendar. It is absolutely compulsory for the student to register for courses in time. The registration will be organized departmentally under the supervision of the Head of the Department.

8.2 IN ABSENTIA registration will not be permitted under any circumstance.

8.3 At the time of registration, students should have cleared all the dues of Institute and Hostel in the previous semesters, paid the prescribed fees for the current semester and not been debarred from institute for a specified period on disciplinary or any other ground.

9.0 UNIQUE COURSE IDENTIFICATION CODE

Every course of the MCA program will be placed in one of the four groups of courses as listed in the Table 2. The various courses and their two-letter codes are given below;

Table 2: Group of Courses

1	Master of Computer Applications	MCA

10.0 CURRICULUM AND COURSE STRUCTURE

The curriculum shall comprise Core Courses, Elective Core Courses, Laboratory Courses, Term Paper, Project Work Phase-I and Project Work Phase-II.

Each Theory and Laboratory course carries credits based on the number of hours / week as follows:

- Lecture Hours (Theory): 1 credit per lecture hour per week.
- Laboratory Hours (Practical): 1 credit for 2 practical hours, 2 credits for 3 or 4 practical hours per week.
- Seminar 2 hours per week
- Project Work: Full Semester Project Work for 10 credits

10.1 Credit distribution for courses offered is shown in Table 3.

Table 3: Credit distribution

1	Courses	4	4
2	sional Core Elective Courses	4	4
3	atory Courses	4	2
4	ar	4	2
5	t Work	20	10
6	kills Practice	2	0
7	nunication Skills Practice	2	0
8	itative Aptitude	2	0
9	ical Aptitude	2	0

10.2

[illegible]	[illegible]	[illegible]	[illegible]
MCA I Semester	5 Core	2	24
MCA II Semester	5 Core	2	24
MCA III Semester	5 Core	2	24
MCA IV Semester	3 Core + Elective-I + Elective-II	2	24
MCA V Semester	3 Core + Elective-III + Elective-IV	2 + Seminar	26
MCA VI Semester	0	Project Work	10
Total	21 Core + Elective-I + Elective-II + Elective-III + Elective-IV	10 + Seminar + Project Work	132

10.3 Course wise break-up for Regular program:

Total Theory Courses (25) Core Courses (21)+Professional Core Electives (04)	21 @ 4credits + 04 @ 4 credits	100
Laboratory Courses – 10	10 @ 2 credits each	20
Seminar	1 @ 2 credits	2
Project Work	1 @ 16 credits	10
TOTAL CREDITS		**132**

11.0 DIVISION OF MARKS FOR INTERNAL AND EXTERNAL ASSESSMENT

[illegible]	[illegible]	[illegible]
Theory	40	60
Laboratory	25	50
Seminar	50	-
Project Work	Grade	

12.0 EVALUATION METHODOLOGY

The performance of a student in each semester shall be evaluated through Continuous Internal Assessment (CIA) and / or an Semester End Examination (SEE) conducted semester wise.

12.1 Theory Course:

The performance of a student in every theory course shall be evaluated for total of 100 marks each, of which the relative weightage for Continuous Internal Assessment and Semester End Examination shall be 40 marks and 60 marks respectively.

12.2 Practical Course:

The performance of a student in every practical course shall be evaluated for total of 75 marks each, of which the relative weightage for Continuous Internal Assessment and Semester End Examination shall be 25 marks and 50 marks respectively.

12.3 Internal Evaluation for Theory Course:

The total internal weightage for theory courses is 40 marks with the following distribution.

- 30 marks for Mid-Term Examination
- 10 marks for Assignment Test

While the first mid-term examination shall be conducted on the 50% of the syllabus (Unit-I, Unit-II, & 50% of Unit-III), the second mid-term examination shall be conducted on the remaining 50% of the syllabus (50 % of Unit III, Unit-IV & Unit-V).

10 marks are allocated for assignment test (as specified by the subject teacher concerned). The first assignment should be conducted after completion of Unit-I & II for 5 marks and the second assignment should be conducted after completion of Unit-III & IV for 5 marks. The final Assignment Test marks will be the addition of these two.

Two midterm examinations each for **30 marks** with the duration of 90 minutes each will be conducted for every theory course in a semester. The midterm examination marks shall be awarded giving a weightage of 80% in the midterm examination in which the student scores better performance and 20% in the remaining midterm examination.

The final mid-term marks obtain by the addition of these two (80% + 20%).

Example: If a student scores 33 marks and 34 marks in the first and second mid-term examinations respectively, then Weighted Average Marks = 34 x 0.8 + 33 x 0.2 = 33.8, rounded to 34 Marks.

Note: The marks of any fraction shall be rounded off to the next higher mark.

12.4 Pattern of the midterm examination question paper is as follows:

- A total of three questions
- Question paper contains six questions are to be designed taking three questions from each unit (Unit Wise - Either or type) of the three units. (3X10=30 Marks)

Pattern of the Assignment Test is as follows:

- Five assignment questions are given in advance, out of which two questions given by the concerned teacher has to be answered during the assignment test
- Sum of Assignment Tests marks is considered.

Note: A student who is absent for any Mid-Term Examination/ Assignment Test, for any reason whatsoever, shall be deemed to have scored zero marks in that Mid-Term Examination/ Assignment Test and no make-up test shall be conducted.

Internal Evaluation for Practical Course:

12.5 For practical subjects there shall be a Continuous Internal Evaluation during the semester for 25 internal marks. Out of the 25 marks for internal evaluation, day-today assessment in the laboratory shall be evaluated for 10 marks and internal practical examination shall be evaluated for 15 marks conducted by the laboratory teacher concerned.

12.6 Internal Evaluation for Seminar:

There shall be a Seminar presentation in V Semester. A Seminar shall have two components, one chosen by the student from the course work as an extension and approved by the faculty supervisor. The other component is suggested by the supervisor and can be a reproduction of the concept in any standard research paper or an extension

of concept from earlier course work. A hard copy of the information on seminar topic in the form of a report is to be submitted for evaluation along with presentation. The presentation of the seminar topics shall be made before a committee consisting of Head of the department, seminar supervisor and a senior faculty member. Each Seminar shall be evaluated for 50 marks. Seminar component-I for 25 marks and component-II for 25 marks making total 50 marks. **(Distribution of marks for 25:** 5 marks for report, 5 marks for subject content, 10 marks for presentation and 5 marks for queries).

12.7 External Evaluation for Theory Course - Semester End Examination:

The Semester End Examination in each theory subject shall be conducted for 3 hours duration at the end of the semester for 60 marks.

Pattern of the Semester End Examination question paper is as follows:

- Question Paper contains ten questions are to be designed taking two questions from each unit (Unit Wise - Either or type) of the total five units. (5X12=60 Marks)

A student has to secure not less than a minimum of 40% of marks (24 marks) exclusively at the Semester End Examinations in each of the theory subjects in which the candidate had appeared. However, the candidate shall have to secure a minimum of 50% of marks (50 marks) in both external and internal components put together to become eligible for passing in the subject.

The emphasis on the questions is broadly based on the following criteria:

50 %	To test the objectiveness of the concept
30 %	To test the analytical skill of the concept
20 %	To test the application skill of the concept

12.8 External Evaluation for Practical Course:

Out of 50 marks **35** marks are allocated for experiment (procedure for conducting the experiment carries 15 marks & readings, calculation and result-20) and **10** marks for viva-voce examination with **5** marks for the record.

Each Semester External Lab Examination shall be evaluated by an Internal Examiner along with an External Examiner appointed by the Principal.

A candidate shall be declared to have passed in individual lab course if he secures a minimum of 50% aggregate marks (38 marks) (Internal & Semester External Examination marks put together), subject to a minimum of 50% marks (25 marks) in the semester external examination.

12.9 External Evaluation for Project Work Phase-II:

Every candidate shall be required to submit thesis or dissertation after taking up a topic approved by the college/ concerned department.

- **Registration of Project work**: A candidate is permitted to register for the project work phase-I after satisfying the attendance requirement of all the courses (theory and practical courses of I & II Semesters)
- An Internal Departmental Committee (I.D.C) consisting of HOD, Supervisor/ Guide

  and one Internal senior expert shall monitor the progress of the project work.
- The work on the project work phase-II shall be initiated in the IV semester. The candidate can submit Project work phase-II dissertation with the approval of I.D.C.

after 18 weeks from the date of registration at the earliest from the date of registration for the project work phase-I.

- The student must submit status report at least in three different phases during the project work period. These reports must be approved by the I.D.C before submission of the Project Report.
- Three copies of the Dissertation certified in the prescribed form by the supervisor and HOD shall be submitted to the HOD.
- The semester end examination for project work phase-I done during III Semester, shall be conducted by a Project Review Committee (PRC). The evaluation of project work shall be conducted at the end of the IV Semester.
- The PRC comprises of an External examiner appointed by the Principal, Head of the Department and Project Guide/Supervisor to adjudicate the dissertation. The PRC shall jointly evaluate candidates work and award grades as given below

S.No	Description	Grade	Grade Point (GP) Assigned
1	Very Good	Grade A	10
2	Good	Grade B	9
3	Satisfactory	Grade C	8
4	Not satisfactory	Grade D	0

If the report of the viva-voce is not satisfactory (Grade D) the candidate will retake the viva-voce examination after three months. If he fails to get a satisfactory report at the second viva-voce examination he will not be eligible for the award of the degree unless the candidate is permitted to revise and resubmit the dissertation.

12.13 Re-Registration For Improvement of Internal Evaluation Marks:

Following are the conditions to avail the benefit of improvement of internal evaluation marks.

- ❖ The candidate should have completed the course work and obtained examinations results for I, II & III semesters.
- ❖ He should have passed all the subjects for which the internal evaluation marks secured are more than 50%.
- ❖ Out of the subjects the candidate has failed in the examination due to Internal evaluation marks secured being less than 50%, the candidate shall be given one more chance for each Theory subject and for a maximum of **three** Theory subjects for Improvement of Internal evaluation marks.
- ❖ The candidate has to re-register for the subjects so chosen and fulfill all the academic requirements.
- ❖ For each subject, the candidate has to pay a fee equivalent to one third of the semester tuition fee and the amount is to be remitted in the form of D.D. in favour of **'The Principal, Audisankara College of Engineering & Technology' payable at Gudur** along with the requisition through the Controller of the Examinations of the college.

In the event of availing the Improvement of Internal evaluation marks, the internal evaluation marks as well as the End Examinations marks secured in the previous attempt(s) for the reregistered subjects stand cancelled

13.0 GRADING PROCEDURE

Grades will be awarded to indicate the performance of students in each theory subject, laboratory / practicals, Term Paper, Project Work Phase-I and Project Work Phase-II. Based on the percentage of marks obtained (Continuous Internal Evaluation plus Semester End Examination, both taken together) as specified in item 11 above, a

corresponding letter grade shall be given.

13.1 As a measure of the performance of a student, a 10-point absolute grading system using the following letter grades (as per UGC/AICTE guidelines) and corresponding percentage of marks shall be followed:

91-100	S (Superior)	10
81-90	A (Excellent)	9
70-80	B (Very Good)	8
60-69	C (Good)	7
55-59	D (Average)	6
50-54	E (Pass)	5
<50	F (FAIL)	0
Ab (Absent)	Ab	0

13.2 A student who has obtained an 'F' grade in any subject shall be deemed to have 'failed' and is required to reappear as a 'supplementary student' in the semester end examination, as and when offered. In such cases, internal marks in those subjects will remain the same as those obtained earlier

13.3 To a student who has not appeared for an examination in any subject, 'Ab' grade will be allocated in that subject, and he is deemed to have 'failed'. A student will be required to reappear as a 'supplementary student' in the semester end examination, as and when offered next. In this case also, the internal marks in those subjects will remain the same as those obtained earlier.

13.4 A letter grade does not indicate any specific percentage of marks secured by the student, but it indicates only the range of percentage of marks.

13.5 A student earns grade point (GP) in each subject/ course, on the basis of the letter grade secured in that subject/ course. The corresponding 'credit points' (CP) are computed by multiplying the grade point with credits for that particular subject/ course.
Credit points (CP) = grade point (GP) x credits .... For a course

13.6 A student passes the subject/ course only when GP ≥5 ('E' grade or above)

13.7
- A student obtaining Grade F shall be considered failed and will be required to reappear for that subject when the next supplementary examination offered.
- For Mandatory courses "Satisfactory" or "Unsatisfactory" shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA.

13.8 **Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):**

v. The Semester Grade Point Average (SGPA) is the ratio of sum of the product of the number of credits with 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, i.e.,

$$SGPA = \Sigma (C_i \times G_i)/\Sigma C_i$$

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

vi. The Cumulative Grade Point Average (CGPA) will be computed in the same manner taking into account all the courses undergone by a student over all the semesters of a program, i.e.,

$$CGPA = \Sigma (C_i \times S_i)/ \Sigma C_i$$

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

ix. Both SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

x. While computing the SGPA the subjects in which the student is awarded Zero grade points will also be included.

Grade Point: It is a numerical weight allotted to each letter grade on a 10-point scale.

Letter Grade: It is an index of the performance of students in a said course. Grades are denoted by letters S, A, B, C, D, E and F.

Example: Computation of SGPA and CGPA

Illustration for SGPA

Course-I	3	S	10	3x10=30
Course-II	3	A	9	3x9=27
Course-III	3	B	8	3x8=24
Course-IV	3	D	6	3x6=18
Course-V	2	B	8	2x8=16
Course-VI	1	C	7	1x7=7
	15			122

Thus, SGPA=$\frac{122}{15}$ = 8.13

Illustration for CGPA

Credit: 22 SGPA: 8.13	Credit: 22 SGPA: 6.9	Credit: 18 SGPA: 7.3	Credit: 16 SGPA: 6.8

Thus, CGPA= $\frac{(22x8.13)+(22x6.9)+(18x7.3)+(16x6.8)}{78}$

= 7.318

14.0 AWARD OF CLASS

14.1 After a student has satisfied the requirement prescribed for the completion of the program and is eligible for the award of M.Tech. Degree he/she shall be placed in one of the following four classes:

CGPA ≥ 7.5	CGPA ≥ 6.5 and < 7.5	CGPA ≥ 5.5 and < 6.5	CGPA ≥ 5.0 and < 5.5	CGPA < 5.0
First Class with Distinction	**First Class**	**Second Class**	**Pass Class**	**Fail**

A student with final CGPA is < 5.00 will not be eligible for the Award of the Degree.

15.0 CONDUCT OF SEMESTER END EXAMINATIONS AND EVALUATION

15.1 Semester end examination shall be conducted by the Controller of Examinations (COE) by inviting Question Papers from the External Examiners

15.2 Question papers may be moderated for the coverage of syllabus, pattern of questions by a Semester End Examination Committee chaired by CoE and senior subject expert before the commencement of semester end examinations. Internal Examiner shall prepare a detailed scheme of valuation.

15.3 The answer papers of semester end examination should be evaluated by the first examiner immediately after the completion of exam and the award sheet should be submitted to CoE in a sealed cover before the same papers are kept for second evaluation by external examiner.

15.4 In case of difference is more than 15% of marks, the answer paper shall be re-evaluated by a third examiner appointed by the Examination Committee and the marks awarded by third examiner is compared with first and second evaluation marks and higher marks of minimum difference pair will be considered as final marks.

15.5 CoE shall invite required number of external examiners to evaluate all the end-semester answer scripts on a prescribed date(s). Practical laboratory exams are conducted involving external examiners.

15.6 Examinations Control Committee shall consolidate the marks awarded by both the examiners and award grades.

16.0 SUPPLEMENTARY EXAMINATIONS

Apart from the regular End Examinations the institute may also schedule and conduct supplementary examinations for all subjects for the benefit of students with backlogs. Such students writing supplementary examinations as supplementary candidates may have to write more than one examination per day.

17.0 ATTENDANCE REQUIREMENTS AND DETENTION POLICY

17.1 A candidate shall put in a minimum required attendance of 75 % in that semester. Otherwise, s/he shall be declared detained and has to repeat semester.

17.2 For cases of medical issues, deficiency of attendance in a semester to the extent of 10% may be condoned by the College Academic Committee (CAC) on the recommendation of Head of the department if their attendance is between 75% and 65% in a semester, subjected to submission of medical certificates, medical

case file and other needful documents to the concerned departments. The condonation is permitted maximum of two times during the entire course of study.

17.3 A prescribed fee shall be payable towards condonation of shortage of attendance.

17.4 A student shall not be promoted to the next semester unless he/she satisfies the attendance requirement of the present semester, as applicable. They may seek readmission into that semester when offered next. If any candidate fulfills the attendance requirement in the present semester, he/she shall not be eligible for readmission into the same class.

17.5 Any student against whom any disciplinary action by the institute is pending shall not be permitted to attend any SEE in that semester.

18.0 PROMOTION POLICIES

The following academic requirements have to be satisfied in addition to the attendance requirements mentioned in item no. 17.

18.1 A student shall register and put up minimum attendance in all 132 credits and earn all the 132 credits. Marks obtained in all 132 credits shall be considered for the calculation of aggregate percentage of marks obtained.

19.0 GRADUATION REQUIREMENTS

The following academic requirements shall be met for the award of the M.Tech degree.

19.1 Student shall register and acquire minimum attendance in all courses and secure 78 credits for regular program and 78 credits for lateral entry program.

19.2 A student of a regular program, who fails to earn 78 credits within eight consecutive academic years from the year of his/her admission with a minimum CGPA of 5.0, shall forfeit his/her degree and his/her admission stands cancelled.

20.0 REVALUATION

A student, who seeks the re-evaluation of the answer script, is directed to apply for the photocopy of his/her semester examination answer paper(s) in the theory course(s), within 5 working days from the declaration of results in the prescribed format with prescribed fee to the Controller of Examinations through the Head of the department. On receiving the photocopy, the student can consult with a competent member of faculty and seek the opinion for revaluation. Based on the recommendations, the student can register for the revaluation with prescribed fee. The Controller of Examinations shall arrange for the revaluation and declare the results. Revaluation is not permitted to the courses other than theory courses.

21.0 TEMPORARY BREAK OF STUDY FROM THE PROGRAMME

21.1 A candidate is normally not permitted to break the study. However, if a candidate intends to temporarily discontinue the program in the middle for valid reasons (such as accident or hospitalization due to prolonged ill health) and to rejoin the program after the break from the commencement of the respective semester as and when it is offered , s/he shall apply to the Principal in advance. Such application shall be submitted before the commencement of the semester in question and forwarded through the Head of the department stating the reasons for such withdrawal together with supporting documents

and endorsement of his / her parent / guardian.

21.2 The institute shall examine such an application and if it finds the case to be genuine, it may permit the student to rejoin. Such permission is accorded only to those who do not have any outstanding dues like tuition fee etc.

21.3 The total period for completion of the program reckoned from the commencement of the semester to which the candidate was first admitted shall not exceed the maximum period specified in clause 19.0. The maximum period includes the break period.

22.0 TERMINATION FROM THE PROGRAMME

The admission of a student to the program may be terminated and the student is asked to leave the institute in the following circumstances:

22.1 The student fails to satisfy the requirements of the program within the maximum period stipulated for that program.

22.2 A student shall not be permitted to study any semester more than three times during the entire Program of study.

22.3 The student fails to satisfy the norms of discipline specified by the institute from time to time.

23.0 WITH-HOLDING OF RESULTS

If the candidate has any dues not paid to the institute or if any case of indiscipline or malpractice is pending against him/her, the result of the candidate shall be withheld and he/she will not be allowed / promoted into the next higher semester. The issue of awarding degree is liable to be withheld in such cases.

24.0 STUDENT TRANSFERS

Student transfers shall be as per the guidelines issued by the Government of Andhra Pradesh from time to time.

25.0 GRADUATION DAY

The institute shall have its own annual Graduation Day for the award of Degrees to students completing the prescribed academic requirements in each case, in consultation with the University and by following the provisions in the Statute. The college shall institute prizes and medals to meritorious students and award them annually at the Graduation Day. This will greatly encourage the students to strive for excellence in their academic work.

26.0 CONDUCT AND DISCIPLINE

- Students shall conduct themselves within and outside the premises of the Institute in a descent and dignified manner befitting the students of Audisankara College of Engineering & Technology.
- As per the order of the Honorable Supreme Court of India, ragging in any form is considered a criminal offence and is totally banned. Any form of ragging will be severely dealt with the following acts of omission and / or commission shall constitute gross violation of the code of conduct and are liable to invoke disciplinary measures with regard to ragging.

(vii) Lack of courtesy and decorum; indecent behavior anywhere within or outside the college campus.

(viii) Damage of college property or distribution of alcoholic drinks or any kind of narcotics to fellow students / citizens.

- Possession, consumption or distribution of alcoholic drinks or any kind of narcotics or hallucinogenic drugs.
- Mutilation or unauthorized possession of library books.
- Noisy and unruly behavior, disturbing studies of fellow students.
- Hacking in computer systems (such as entering into other person's areas without prior permission, manipulation and / or damage of computer hardware and software or any other cyber crime etc.
- Usage of camera /cell phones in the campus.
- Plagiarism of any nature.
- Any other act of gross indiscipline as decided by the college academic council from time to time.
- Commensurate with the gravity of offense, the punishment may be reprimand, fine, expulsion from the institute/ hostel, debarring from examination, disallowing the use of certain facilities of the Institute, rustication for a specified period or even outright expulsion from the Institute, or even handing over the case to appropriate law enforcement authorities or the judiciary, as required by the circumstances.
- For an offence committed in (i) a hostel (ii) a department or in a class room and (iii) elsewhere, the chief Warden, the concern Head of the Department and the Principal respectively, shall have the authority to reprimand or impose fine.
- Cases of adoption of unfair means and/ or any malpractice in an examination shall be reported to the principal for taking appropriate corrective action.
- All cases of serious offence, possibly requiring punishment other than reprimand, shall be reported to the Academic council of the college.
- The Institute Level Standing Disciplinary Action Committee constituted by the academic council shall be the authority to investigate the details of the offence, and recommend disciplinary action based on the nature and extent of the offence committed.
- The Principal shall deal with any problem, which is not covered under these rules and regulations.

27.0 GRIEVANCE REDRESSAL COMMITTEE

Grievance and Redressal Committee constituted by the Principal shall deal with all grievances pertaining to the academic / administrative / disciplinary matters. All the students must abide by the code and conduct rules prescribed by the college from time to time.

28.0 TRANSITORY REGULATIONS

Required to do all the courses in the curriculum prescribed for the batch of students in which the student joins subsequently. However, exemption will be given to those candidates who have already passed such courses in the earlier semester(s) s/he was originally admitted into and substitute subjects are offered in place of them as decided by the Board of Studies. However, the decision of the Board of Studies will be final.

28.1 Three Year MCA Regular course:

A student who is following Jawaharlal Nehru Technological University Anantapur (JNTUA) curriculum and detained due to shortage of attendance at the end of the first semester shall join the autonomous batch of first semester. Such students shall study all the courses prescribed for the batch in which the student joins and considered on par with regular candidates of Autonomous stream and will be governed by the autonomous regulations.

A student who is following JNTUA curriculum, detained due to lack of credits or shortage of attendance at the end of the second semester or at the subsequent semesters shall join with the autonomous batch in the appropriate semester. Such candidates shall be required to pass in all the courses in the program prescribed by the Board of Studies concerned for that batch of students from that semester onwards to be eligible for the award of degree. However, exemption will be given in the courses of the semester(s) of the batch which he had passed earlier and substitute courses will be offered in place of them as decided by the Board of Studies. The student has to clear all his backlog courses up to previous semester by appearing for the supplementary examinations conducted by JNTUA for the award of degree. The total number of credits to be secured for the award of the degree will be sum of the credits up to previous semester under JNTUA regulations and the credits prescribed for the semester in which a candidate seeks readmission and subsequent semesters under the autonomous stream. The class will be awarded based on the academic performance of a student in the autonomous pattern.

28.2 Transfer candidates (from non-autonomous college affiliated to JNTUA):

A student who is following JNTUA curriculum, transferred from other college to this institute in third semester or subsequent semesters shall join with the autonomous batch in the appropriate semester. Such candidates shall be required to pass in all the courses in the program prescribed by the Board of Studies concerned for that batch of students from that semester onwards to be eligible for the award of degree. However, exemption will be given in the courses of the semester(s) of the batch which he had passed earlier and substitute courses are offered in their place as decided by the Board of Studies. The student has to clear all his backlog courses up to previous semester by appearing for the supplementary examinations conducted by JNTUA for the award of degree. The total number of credits to be secured for the award of the degree will be the sum of the credits upto previous semester under JNTUA regulations and the credits prescribed for the semester in which a candidate joined after transfer and subsequent semesters under the autonomous status. The class will be awarded based on the academic performance of a student in the autonomous pattern.

28.3 Transfer candidates (from an autonomous college affiliated to JNTUA):

A student who has secured the required credits upto previous semesters as per the regulations of other autonomous institutions shall also be permitted to be transferred to this institute. A student who is transferred from the other autonomous colleges to this institute in third semester or subsequent semesters shall join with the autonomous batch in the appropriate semester. Such candidates shall be required to pass in all the courses in the program prescribed by the Board of Studies concerned for that batch of students from that semester onwards to be eligible for the award of degree. However, exemption will be given in the courses of the semester(s) of the batch which he had passed earlier and substitute subjects are offered in their place as decided by the Board of Studies. The total number of credits to be secured for the award of the degree will be the sum of the

credits upto previous semester as per the regulations of the college from which he is transferred and the credits prescribed for the semester in which a candidate joined after transfer and subsequent semesters under the autonomous status. The class will be awarded based on the academic performance of a student in the autonomous pattern.

29.0 REVISION OF REGULATIONS AND CURRICULUM

The Institute from time to time may revise, amend or change the regulations, scheme of examinations and syllabi if found necessary and on approval by the Academic Council and the Governing Body shall come into force and shall be binding on the students, faculty, staff, all authorities of the Institute and others concerned.

MALPRACTICES RULES

DISCIPLINARY ACTION FOR / IMPROPER CONDUCT IN EXAMINATIONS

S.No	Nature of Malpractices/Improper conduct	Punishment
	If the candidate:	
1. (a)	Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, cell phones, pager, palm computers or any other form of material concerned with or related to the subject of the examination (theory or practical) in which he is appearing but has not made use of (material shall include any marks on the body of the candidate which can be used as an aid in the subject of the examination)	Expulsion from the examination hall and cancellation of the performance in that subject only.
(b)	Gives assistance or guidance or receives it from any other candidate orally or by any other body language methods or communicates through cell phones with any candidate or persons in or outside the exam hall in respect of any matter.	Expulsion from the examination hall and cancellation of the performance in that subject only of all the candidates involved. In case of an outsider, he will be handed over to the police and a case is registered against him.
2.	Has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the subject of the examination (theory or practical) in which the candidate is appearing.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the subjects of that Semester/year. The Hall Ticket of the candidate is to be cancelled and sent to the Controller of Examinations.
3.	Impersonates any other candidate in connection with the examination.	The candidate who has impersonated shall be expelled from examination hall. The candidate is also debarred and forfeits the seat. The performance of the original candidate, who has been impersonated, shall be cancelled in all the subjects of the examination (including practicals and project work) already appeared and shall not be allowed to appear for examinations of the remaining subjects of that

		semester/year. The candidate is also debarred for two consecutive semesters from class work and all semester end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. If the imposter is an outsider, he will be handed over to the police and a case is registered against him.
4.	Smuggles in the Answer book or additional sheet or takes out or arranges to send out the question paper during the examination or answer book or additional sheet, during or after the examination.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all semester end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
5.	Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass marks.	Cancellation of the performance in that subject.
6.	Refuses to obey the orders of the Controller of Examinations /Additional Controller of Examinations/any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organizes a walk out or instigates others to walk out, or threatens the COE or any person on duty in or outside the examination hall of any injury to his person or to any of his relations whether by words, either spoken or written or by signs or by visible representation, assaults the COE or any person on duty in or outside the examination hall or any of his relations, or indulges in any other act of misconduct or mischief which result in damage to or destruction of property in the examination hall or any part of the Institute premises or engages in any other act which in the opinion of the officer on duty amounts to use of unfair means or misconduct or has the tendency to disrupt the orderly conduct of the examination.	In case of students of the college, they shall be expelled from examination halls and cancellation of their performance in that subject and all other subjects the candidate(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the subjects of that semester/year. The candidates also are debarred and forfeit their seats. In case of outsiders, they will be handed over to the police and a police case is registered against them.
7.	Leaves the exam hall taking away answer script or intentionally tears of the script or any part thereof inside or outside the examination hall.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that

		semester/year. The candidate is also debarred for two consecutive semesters from class work and all semester end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
8.	Possess any lethal weapon or firearm in the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat.
9.	If student of the college, who is not a candidate for the particular examination or any person not connected with the college indulges in any malpractice or improper conduct mentioned in clause 6 to 8.	Student of the colleges expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat. Person(s) who do not belong to the College will be handed over to police and, a police case will be registered against them.
10.	Comes in a drunken condition to the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year.
11.	Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny.	Cancellation of the performance in that subject and all other subjects the candidate has appeared including practical examinations and project work of that semester/year examinations.
12.	If any malpractice is detected which is not covered in the above clauses 1 to 11 shall be reported to the University for further action to award suitable punishment.	

ITEM-VIII

Review and Approval of the course titles and content of all UG programmes under R18 regulations.

Resolution No : 8/ACC-7

ACC has unanimously approved course titles and content of all UG programmes under R18 regulations with the following suggestions.

Members reviewed the course titles and content of all UG programmes under R18 regulations as follows:

B.Tech I Semester – Civil Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18MD101	Induction Training – 3 weeks (Mandatory Course)	-	-	-	-	-	-	-
2	18BS101	Mathematics-I	3	1	0	30	70	100	4
3	18BS102	Applied Physics	3	0	0	30	70	100	3
4	18ME101	Engineering Mechanics	3	0	0	30	70	100	3
5	18EE101	Basic Electrical Engineering	3	0	0	30	70	100	3
6	18CS101	Programming for Problem Solving	3	0	0	30	70	100	3
7	18BS107	Physics Lab	0	0	2	25	50	75	1
8	18ME104	Workshop Practice	0	0	2	25	50	75	1
9	18CS102	Programming for Problem Solving Lab	0	0	4	25	50	75	2
		Total	**15**	**1**	**8**	**225**	**500**	**725**	**20**

B.Tech II Semester – Civil Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18BS201	Mathematics-II	3	1	0	30	70	100	4
2	18BS103	Applied Chemistry	3	0	0	30	70	100	3
3	18BS104	English	3	0	0	30	70	100	3
4	18ME102	Engineering Graphics	1	0	4	30	70	100	3
5	18CS201	Fundamentals of Data Structures	3	0	0	30	70	100	3
6	18BS108	Chemistry Lab	0	0	2	25	50	75	1
7	18BS109	English Lab	0	0	2	25	50	75	1
8	18CS203	Fundamentals of Data Structures Lab	0	0	4	25	50	75	2
		Total	**13**	**1**	**12**	**225**	**500**	**725**	**20**

B.Tech III Semester – Civil Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18CE301	Materials, Testing and Evaluation	3	1	0	30	70	100	3
2	18CE302	Mechanics of Materials-I	3	0	0	30	70	100	3
3	18CE303	Fluid Mechanics	3	0	0	30	70	100	3
4	18CE304	Surveying and Geomatics	3	0	0	30	70	100	3
5	18CE305	Engineering Geology	3	0	0	30	70	100	3
6	18CE306	Civil Engineering Societal and Global Impact	2	0	0	30	70	100	2
7	18CE307	Mechanics of Materials Lab	0	0	2	25	50	75	1
8	18CE308	Engineering Geology Lab	0	0	2	25	50	75	1
9	18CE309	Surveying Lab-I	0	0	2	25	50	75	1
Non-Credit Courses									
10	18AS301	Professional Society Activities-I	2	0	0	0	0	0	0
11	18AS302	Soft Skills Practice	0	0	2	0	0	0	0
12	18MD301	Environmental Sciences (Mandatory Course)	2	0	0	0	0	0	0
		Total	**21**	**1**	**8**	**255**	**570**	**825**	**20**

B.Tech IV Semester – Civil Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18BS401	Probability and Statistics	3	1	0	30	70	100	3
2	18CE401	Hydraulic Engineering	3	0	0	30	70	100	3
3	18CE402	Mechanics of Materials-II	3	0	0	30	70	100	3
4	18CE403	Environmental Engineering	3	0	0	30	70	100	3
5	18CE404	Concrete Technology	3	0	0	30	70	100	3
6	18BS303	Managerial Economics and Financial Analysis	2	0	0	30	70	100	2
7	18CE405	Hydraulic Engineering Lab	0	0	2	25	50	75	1
8	18CE406	Environmental Engineering Lab	0	0	2	25	50	75	1
9	18CE407	Surveying Lab-II	0	0	2	25	50	75	1
10	18CE408	Technical Seminar	0	2	0	50	-	50	1
Non-Credit Courses									
11	18AS401	Professional Society Activities-II	2	0	0	0	0	0	0
12	18AS402	Communication Skills Practice	0	0	2	0	0	0	0
		Total	**19**	**3**	**8**	**305**	**570**	**875**	**21**

B.Tech V Semester – Civil Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18CE501	Basic Structural Analysis	3	1	0	30	70	100	3
2	18CE502	Hydrology and Water Resources Engineering	3	0	0	30	70	100	3
3	18CE503	Estimation ,Costing and valuation	3	0	0	30	70	100	3
4	18CE504	Basic Reinforced Concrete Design	3	0	0	30	70	100	3
5	18CE505	Geotechnical Engineering	3	0	0	30	70	100	3
6	**Open Elective-I**		2	0	0	30	70	100	2
7	18CE509	Computer Aided Drafting	0	0	2	25	50	75	1
8	18CE510	Material Testing and Evaluation Lab	0	0	2	25	50	75	1
9	18CE511	Geotechnical Engineering Lab	0	0	2	25	50	75	1
Non-Credit Courses									
10	18AS501	Professional Society Activities-III	2	0	0	0	0	0	0
11	18AS502	Quantitative Aptitude	2	0	0	0	0	0	0
12	18MD501	Indian Constitution (Mandatory Course)	2	0	0	0	0	0	0
		Total	**23**	**1**	**6**	**255**	**570**	**825**	**20**

B.Tech VI Semester – Civil Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18CE601	Advanced Structural Analysis	3	1	0	30	70	100	3
2	18CE602	Highway Engineering	3	0	0	30	70	100	3
3	18CE603	Advanced Reinforced Concrete Design	3	0	0	30	70	100	3
4	18CE604	Design of Steel Structures-I	3	0	0	30	70	100	3
5	**Elective-I**								
	18CE605	Foundation Engineering	3	0	0	30	70	100	3
	18CE606	Rural Water Supply and On Site Sanitation Systems							
	18CE607	Hydraulic Structures/ Irrigation Engineering							
	18CE608	Available MOOCs/ 12 week NPTEL courses suggested by the department							
6	**Open Elective-II**		2	0	0	30	70	100	2
7	18CE612	Irrigation Design and Practice Lab	0	0	2	25	50	75	1
8	18CE613	Design & Drawing of Environmental Engineering Lab	0	0	2	25	50	75	1
9	18CE614	Transportation Engineering Lab	0	0	2	25	50	75	1
10	18CE615	Term Paper	0	2	0	50	-	50	1
Non-Credit Courses									
11	18AS601	Professional Society Activities-IV	2	0	0	0	0	0	0
12	18AS602	Technical Aptitude	2	0	0	0	0	0	0
		Total	**21**	**3**	**6**	**305**	**570**	**875**	**21**

B.Tech VII Semester – Civil Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18CE701	Design of Steel Structures-II	3	1	0	30	70	100	3
2	18CE702	Repair and Rehabilitation of Structures	3	0	0	30	70	100	3
3	**Open Elective-III**		2	0	0	30	70	100	2
4	**Elective-II**								
	18CE706	Advanced Structural Design	3	0	0	30	70	100	3
	18CE707	Construction Planning and Scheduling							
	18CE708	Pavement Design and Geometric Design of Highways							
	18CE709	Available MOOCs							
5	**Elective-III**								
	18CE710	Prestressed Concrete	3	0	0	30	70	100	3
	18CE711	Railway , Airport , Doc and Harbour Engineering							
	18CE712	Remote Sensing and GIS							
	18CE713	Available MOOCs/ 12 week NPTEL courses suggested by the department							
6	18CE714	Structural Designing Lab	0	0	2	25	50	75	1
7	18CE715	Survey Camp	0	0	2	25	50	75	1
8	18CE716	Project Work Phase-I	0	0	4	50	50	100	2
9	18CE717	Comprehensive Assessment	0	0	2	100	-	100	1
Non-Credit Courses									
10	18MD701	Essence of Indian Traditional Knowledge (Mandatory Course)	2	0	0	0	0	0	0
		Total	**16**	**1**	**10**	**350**	**500**	**850**	**19**

B.Tech VIII Semester – Civil Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	**Elective-IV**								
	18CE801	Bridge Engineering	3	1	0	30	70	100	3
	18CE802	Experimental Stress Analysis							
	18CE803	Open Channel flow							
	18CE804	Available MOOCs							
2	**Elective-V**								
	18CE805	Finite Element Analysis	3	0	0	30	70	100	3
	18CE806	Environmental Impact and Assessment							
	18CE807	Traffic Engineering and Management							
	18CE808	Available MOOCs							
3	**Elective-VI**								
	18CE809	Ground Improvement Techniques	3	0	0	30	70	100	3
	18CE810	Solid and Hazardous Waste Management							
	18CE811	Earth quake engineering							
	18CE812	Available MOOCs/ 12 week NPTEL courses suggested by the department							
4	18CE813	Project Work Phase-II/ Internship	0	0	20	60	140	200	10
		Total	**9**	**1**	**20**	**150**	**350**	**500**	**19**

Open Electives – Civil Engineering

S.No	Code	Course
OPEN ELECTIVE-I		
1	18CE506	Disaster Management
2	18CE507	Global Information System
3	18CE508	Solid & Hazardous Waste Management
OPEN ELECTIVE-II		
4	18CE609	Sustainable Engineering and Technology
5	18CE610	Environmental Fluid Mechanics
6	18CE611	Environmental Impact Assessment and Life Cycle Analysis
OPEN ELECTIVE-III		
7	18CE703	Water and Air Quality Modeling
8	18CE704	Environmental laws and policy
9	18CE705	Infrastructure Development

B.Tech I Semester – Mechanical Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18MD101	Induction Training – 3 weeks (Mandatory Course)	-	-	-	-	-	-	-
2	18BS101	Mathematics-I	3	1	0	30	70	100	4
3	18BS102	Applied Physics	3	0	0	30	70	100	3
4	18ME101	Engineering Mechanics	3	0	0	30	70	100	3
5	18EE101	Basic Electrical Engineering	3	0	0	30	70	100	3
6	18CS101	Programming for Problem Solving	3	0	0	30	70	100	3
7	18BS107	Physics Lab	0	0	2	25	50	75	1
8	18ME104	Workshop Practice	0	0	2	25	50	75	1
9	18CS102	Programming for Problem Solving Lab	0	0	4	25	50	75	2
		Total	**15**	**1**	**8**	**225**	**500**	**725**	**20**

B.Tech II Semester – Mechanical Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18BS201	Mathematics-II	3	1	0	30	70	100	4
2	18BS103	Applied Chemistry	3	0	0	30	70	100	3
3	18BS104	English	3	0	0	30	70	100	3
4	18ME102	Engineering Graphics	1	0	4	30	70	100	3
5	18CS201	Fundamentals of Data Structures	3	0	0	30	70	100	3
6	18BS108	Chemistry Lab	0	0	2	25	50	75	1
7	18BS109	English Lab	0	0	2	25	50	75	1
8	18CS203	Fundamentals of Data Structures Lab	0	0	4	25	50	75	2
		Total	**13**	**1**	**12**	**225**	**500**	**725**	**20**

B.Tech III Semester – Mechanical Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18BS302	Numerical Methods	3	1	0	30	70	100	3
2	18ME301	Mechanics of Solids	3	0	0	30	70	100	3
3	18ME302	Fluid Mechanics and Hydraulic Machinery	3	0	0	30	70	100	3
4	18ME303	Engineering Thermo Dynamics	3	0	0	30	70	100	3
5	18ME304	Fundamentals of Mechatronics	3	0	0	30	70	100	3
6	18ME305	Industrial Engineering and Management	2	0	0	30	70	100	2
7	18ME307	Strength of Materials Lab	0	0	4	25	50	75	2
8	18ME308	Fluid Mechanics And Hydraulic Machinery Lab	0	0	2	25	50	75	1
9	18EE308	Basic Electrical and Electronics Lab	0	0	2	25	50	75	1
Non-Credit Courses									
10	18AS301	Professional Society Activities-I	2	0	0	0	0	0	0
11	18AS302	Soft Skills Practice	0	0	2	0	0	0	0
12	18MD301	Environmental Sciences (Mandatory Course)	2	0	0	0	0	0	0
		Total	**21**	**1**	**8**	**255**	**570**	**825**	**20**

B.Tech IV Semester – Mechanical Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18BS401	Probability and Statistics	3	1	0	30	70	100	3
2	18ME401	Casting and Welding	3	0	0	30	70	100	3
3	18ME402	Engineering Materials	3	0	0	30	70	100	3
4	18ME403	Kinematics of Machinery	3	0	0	30	70	100	3
5	18ME404	IC Engines and Compressors	3	0	0	30	70	100	3
6	18BS303	Managerial Economics and Financial Analysis	2	0	0	30	70	100	2
7	18ME405	Machine Drawing	0	0	2	25	50	75	1
8	18ME406	IC Engines and Compressors Lab	0	0	2	25	50	75	1
9	18ME407	Manufacturing and Metallurgy Technology Lab	0	0	2	25	50	75	1
10	18ME408	Technical Seminar	0	2	0	50	-	50	1
Non-Credit Courses									
11	18AS401	Professional Society Activities-II	2	0	0	0	0	0	0
12	18AS402	Communication Skills Practice	2	0	0	0	0	0	0
		Total	**21**	**3**	**6**	**305**	**570**	**875**	**21**

B.Tech V Semester – Mechanical Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18ME501	Design of Machine Elements	3	1	0	30	70	100	3
2	18ME502	Dynamics of Machinery	3	0	0	30	70	100	3
3	18ME503	Therm-Turbo Machinery	3	0	0	30	70	100	3
4	18ME504	Metal Cutting and Machine Tools	3	0	0	30	70	100	3
5	18ME505	Measurements and Metrology	3	0	0	30	70	100	3
6	**Open Elective-I**		2	0	0	30	70	100	2
7	18ME509	Machine Tools and Metrology Lab	0	0	2	25	50	75	1
8	18ME510	Instrumentation and Dynamics Lab	0	0	2	25	50	75	1
9	18ME511	Fuels and Lubrication Lab	0	0	2	25	50	75	1
Non-Credit Courses									
10	18AS501	Professional Society Activities-III	2	0	0	0	0	0	0
11	18AS502	Quantitative Aptitude	2	0	0	0	0	0	0
12	18MD501	Indian Constitution (Mandatory Course)	2	0	0	0	0	0	0
		Total	**23**	**1**	**6**	**255**	**570**	**825**	**20**

B.Tech VI Semester – Mechanical Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18ME601	Heat and Mass Transfer	3	1	0	30	70	100	3
2	18ME602	CAD/ CAM	3	0	0	30	70	100	3
3	18ME603	Finite Element Methods	3	0	0	30	70	100	3
4	18ME604	Design of Transmission Elements	3	0	0	30	70	100	3
5	**Elective-I**								
	18ME605	Industrial Robotics	3	0	0	30	70	100	3
	18ME606	Advanced Machining Process							
	18ME607	Composite Materials							
	18ME608	Available MOOCs/ 12 week NPTEL courses suggested by the department							
6	**Open Elective-II**		2	0	0	30	70	100	2
7	18ME612	Heat Transfer Lab	0	0	2	25	50	75	1
8	18ME613	CAE Lab	0	0	2	25	50	75	1
9	18ME614	Production and Operation Management Lab	0	0	2	25	50	75	1
10	18ME615	Term Paper	0	2	0	50	-	50	1
Non-Credit Courses									
11	18AS601	Professional Society Activities-IV	2	0	0	0	0	0	0
12	18AS602	Technical Aptitude	2	0	0	0	0	0	0
		Total	**21**	**3**	**6**	**305**	**570**	**875**	**21**

B.Tech VII Semester – Mechanical Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18ME701	Metal Forming Process	3	1	0	30	70	100	3
2	18ME702	Operations Research	3	0	0	30	70	100	3
3	**Open Elective-III**		2	0	0	30	70	100	2
4	**Elective-II**								
	18ME706	Auto Mobile Engineering	3	0	0	30	70	100	3
	18ME707	Tool Design							
	18ME708	Total Quality Management							
	18ME709	Available MOOCs							
5	**Elective-III**								
	18ME710	Refrigeration and Air Conditioning	3	0	0	30	70	100	3
	18ME711	Tribology							
	18ME712	Non-Conventional Energy Sources							
	18ME713	Available MOOCs/ 12 week NPTEL courses suggested by the department							
6	18ME714	CAM Lab	0	0	2	25	50	75	1
7	18ME715	Thermal Engineering Lab	0	0	2	25	50	75	1
8	18ME716	Project Work Phase-I	0	0	4	50	50	100	2
9	18ME717	Comprehensive Assessment	0	0	2	100	-	100	1
Non-Credit Course									
10	18MD701	Essence of Indian Traditional Knowledge (Mandatory Course)	2	0	0	0	0	0	0
		Total	**16**	**1**	**10**	**350**	**500**	**850**	**19**

B.Tech VIII Semester – Mechanical Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	**Elective-IV**								
	18ME801	Power Plant Engineering	3	1	0	30	70	100	3
	18ME802	Nano Materials Processing and Properties							
	18ME803	Design and Analysis of Experiments							
	18ME804	Non Destructive Testing							
2	**Elective-V**								
	18ME805	Rapid Prototyping	3	0	0	30	70	100	3
	18ME806	Computational Fluid Dynamics							
	18ME807	Design for Manufacturing							
	18ME808	Available MOOCs							
3	**Elective-VI**								
	18ME809	Production Planning and Control	3	0	0	30	70	100	3
	18ME810	Concepts of Engineering Design							
	18ME811	Mechanical Vibrations							
	18ME812	Available MOOCs/ 12 week NPTEL courses suggested by the department							
4	18ME813	Project Work Phase-II/ Internship	0	0	20	60	140	200	10
		Total	**9**	**1**	**20**	**150**	**350**	**500**	**19**

Open Electives – Mechanical Engineering

S.No	Code	Course
OPEN ELECTIVE-I		
1	18ME506	Electric Cars
2	18ME507	Mechatronics
3	18ME508	Robotics for Future Industrial Applications
OPEN ELECTIVE-II		
4	18ME609	Energy Systems
5	18ME610	Six Sigma
6	18ME611	Total Quality Management
OPEN ELECTIVE-III		
7	18ME703	Smart Materials
8	18ME704	Micro- Electromechanical Systems [MEMS]
9	18ME705	Industrial Engineering

B.Tech I Semester – Electrical & Electronics Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18MD101	Induction Training – 3 weeks (Mandatory Course)	-	-	-	-	-	-	-
2	18BS101	Mathematics-I	3	1	0	30	70	100	4
3	18BS105	Engineering Chemistry	3	0	0	30	70	100	3
4	18BS104	English	3	0	0	30	70	100	3
5	18ME102	Engineering Graphics	1	0	4	30	70	100	3
6	18CS101	Programming for Problem Solving	3	0	0	30	70	100	3
7	18BS108	Chemistry Lab	0	0	2	25	50	75	1
8	18BS109	English Lab	0	0	2	25	50	75	1
9	18CS102	Programming for Problem Solving Lab	0	0	4	25	50	75	2
		Total	**13**	**1**	**12**	**225**	**500**	**725**	**20**

B.Tech II Semester – Electrical & Electronics Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18BS201	Mathematics-II	3	1	0	30	70	100	4
2	18BS106	Engineering Physics	3	0	0	30	70	100	3
3	18ME103	Basic Mechanical and Civil Engineering	3	0	0	30	70	100	3
4	18EE201	Circuit Theory	3	0	0	30	70	100	3
5	18CS202	Data Structures	3	0	0	30	70	100	3
6	18BS107	Physics Lab	0	0	2	25	50	75	1
7	18ME104	Workshop Practice	0	0	2	25	50	75	1
8	18CS204	Data Structures Lab	0	0	4	25	50	75	2
		Total	**15**	**1**	**8**	**225**	**500**	**725**	**20**

B.Tech III Semester – Electrical & Electronics Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18BS301	Complex Analysis	3	1	0	30	70	100	3
2	18EC301	Electronic Devices and Circuits	3	0	0	30	70	100	3
3	18EE301	Network Theory	3	0	0	30	70	100	3
4	18EE302	Electromagnetic Fields	3	0	0	30	70	100	3
5	18EE303	Electrical Machines – I	3	0	0	30	70	100	3
6	18BS303	Managerial Economics and Financial Analysis	2	0	0	30	70	100	2
7	18EC306	Electronic Devices and Circuits Lab	0	0	2	25	50	75	1
8	18EE305	Electrical Circuits Lab	0	0	2	25	50	75	1
9	18EE306	Electrical Workshop Lab	0	0	2	25	50	75	1
Non-Credit Courses									
10	18AS301	Professional Society Activities-I	2	0	0	0	0	0	0
11	18AS302	Soft Skills Practice	0	0	2	0	0	0	0
12	18MD301	Environmental Sciences (Mandatory Course)	2	0	0	0	0	0	0
		Total	**21**	**1**	**8**	**255**	**570**	**825**	**20**

B.Tech IV Semester – Electrical & Electronics Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18ME302	Fluid Mechanics and Hydraulic Machinery	3	0	0	30	70	100	3
2	18EC406	Digital Electronics	3	0	0	30	70	100	3
3	18EE401	Electrical Machines – II	3	0	0	30	70	100	3
4	18EE402	Generation of Electrical Power	3	0	0	30	70	100	3
5	18EE403	Electrical Measurements and Instrumentation	3	0	0	30	70	100	3
6	18ME306	Management Science	2	0	0	30	70	100	2
7	18ME308	Fluid Mechanics and Hydraulic Machinery Lab	0	0	2	25	50	75	1
8	18EE404	Electrical Machines Lab - I	0	0	2	25	50	75	1
9	18EE405	Measurements and Instrumentation Lab	0	0	2	25	50	75	1
10	18EE406	Technical Seminar	0	2	0	50	-	50	1
Non-Credit Courses									
11	18AS401	Professional Society Activities-II	2	0	0	0	0	0	0
12	18AS402	Communication Skills Practice	0	0	2	0	0	0	0
		Total	**19**	**3**	**8**	**305**	**570**	**875**	**21**

B.Tech V Semester – Electrical & Electronics Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18EC509	Analog Electronics	3	0	0	30	70	100	3
2	18EE501	Power Electronics	3	1	0	30	70	100	3
3	18EE502	Transmission and Distribution of Electrical Power	3	0	0	30	70	100	3
4	18EE503	Control Systems	3	0	0	30	70	100	3
5	18EE504	Electrical Machines-III	3	0	0	30	70	100	3
6	**Open Elective-I**		2	0	0	30	70	100	2
7	18EC514	Analog Electronics Lab	0	0	2	25	50	75	1
8	18EE508	Electrical Machines Lab-II	0	0	2	25	50	75	1
9	18EE509	Control Systems Lab	0	0	2	25	50	75	1
Non-Credit Courses									
10	18AS501	Professional Society Activities-III	2	0	0	0	0	0	0
11	18AS502	Quantitative Aptitude	2	0	0	0	0	0	0
12	18MD501	Indian Constitution (Mandatory Course)	2	0	0	0	0	0	0
		Total	**23**	**1**	**6**	**255**	**570**	**825**	**20**

B.Tech VI Semester – Electrical & Electronics Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18EC303	Signals and Systems	3	0	0	30	70	100	3
2	18EC505	Microprocessors and Microcontrollers	3	0	0	30	70	100	3
3	18EE601	Power System Analysis	3	1	0	30	70	100	3
4	18EE602	Power Semiconductor Drives	3	0	0	30	70	100	3
5	**Elective-I**								
	18EE603	High Voltage Engineering	3	0	0	30	70	100	3
	18EE604	Electrical Energy Conservation and Auditing							
	18EE605	Computer Architecture							
	18EE606	Available MOOCs/ 12 week NPTEL courses suggested by the department							
6	**Open Elective-II**		2	0	0	30	70	100	2
7	18EC513	Microprocessors and Microcontrollers Lab	0	0	2	25	50	75	1
8	18EE610	Simulation of Electrical Systems Lab	0	0	2	25	50	75	1
9	18EE611	Power Electronics Lab	0	0	2	25	50	75	1
10	18EE612	Term Paper	0	2	0	50	-	50	1
Non-Credit Courses									
11	18AS601	Professional Society Activities-IV	2	0	0	0	0	0	0
12	18AS602	Technical Aptitude	2	0	0	0	0	0	0
		Total	**21**	**3**	**8**	**305**	**570**	**875**	**21**

B.Tech VII Semester – Electrical & Electronics Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18EE701	Utilization of Electrical Energy	3	1	0	30	70	100	3
2	18EE702	Power System Operation and Control	3	0	0	30	70	100	3
3	**Open Elective-III**		2	0	0	30	70	100	2
4	**Elective-II**								
	18EC715	Embedded Systems	3	0	0	30	70	100	3
	18EE706	Power System Protection							
	18EE707	PLCS and SCADA							
	18EE708	Available MOOCs							
5	**Elective-III**								
	18EC716	Digital Signal Processing	3	0	0	30	70	100	3
	18EE709	Wind and Solar Energy Systems							
	18EE710	Flexible AC transmission Systems							
	18EE711	Available MOOCs/ 12 week NPTEL courses suggested by the department							
6	18EE712	Power Electronics and Drives Lab	0	0	2	25	50	75	1
7	18EE713	Power Systems Lab	0	0	2	25	50	75	1
8	18EE714	Project Work Phase-I	0	0	4	50	50	100	2
9	18EE715	Comprehensive Assessment	0	0	2	100	-	100	1
Non-Credit Course									
10	18MD701	Essence of Indian Traditional Knowledge (Mandatory Course)	2	0	0	0	0	0	0
		Total	**16**	**1**	**10**	**350**	**500**	**850**	**19**

B.Tech VIII Semester – Electrical & Electronics Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	**Elective-IV**								
	18EE801	Advanced Electrical Drives	3	1	0	30	70	100	3
	18EE802	HVDC Transmission Systems							
	18EE803	Industrial Electrical Systems							
	18EE804	Available MOOCs							
2	**Elective-V**								
	18EE805	Digital Control Systems	3	0	0	30	70	100	3
	18EE806	Smart Grid							
	18EE807	Power System Reliability							
	18EE808	Available MOOCs							
3	**Elective-VI**								
	18EC813	VLSI Design	3	0	0	30	70	100	3
	18EE809	Electrical Materials							
	18EE810	Power Plant Engineering							
	18EE811	Available MOOCs/ 12 week NPTEL courses suggested by the department							
4	18EE812	Project Work Phase-II/ Internship	0	0	20	60	140	200	10
		Total	**9**	**1**	**20**	**150**	**350**	**500**	**19**

Open Electives – Electrical & Electronics Engineering

S.No	Code	Course
OPEN ELECTIVE-I		
1	18EE505	Power Quality
2	18EE506	Energy Auditing and Demand Side Management
3	18EE507	Power Plant Engineering
OPEN ELECTIVE-II		
4	18EE607	Neural Networks and Fuzzy Logic
5	18EE608	Electrical Materials
6	18EE609	Illumination Engineering
OPEN ELECTIVE-III		
7	18EE703	Industrial Automation and Control
8	18EE704	Energy Conservation
9	18EE705	Optimization Techniques

B.Tech I Semester – Electronics & Communication Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18MD101	Induction Training – 3 weeks (Mandatory Course)-	-	-	-	-	-	-	-
2	18BS101	Mathematics-I	3	1	0	30	70	100	4
3	18BS105	Engineering Chemistry	3	0	0	30	70	100	3
4	18BS104	English	3	0	0	30	70	100	3
5	18ME102	Engineering Graphics	1	0	4	30	70	100	3
6	18CS101	Programming for Problem Solving	3	0	0	30	70	100	3
7	18BS108	Chemistry Lab	0	0	2	25	50	75	1
8	18BS109	English Lab	0	0	2	25	50	75	1
9	18CS102	Programming for Problem Solving Lab	0	0	4	25	50	75	2
		Total	**13**	**1**	**12**	**225**	**500**	**725**	**20**

B.Tech II Semester – Electronics & Communication Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18BS201	Mathematics-II	3	1	0	30	70	100	4
2	18BS106	Engineering Physics	3	0	0	30	70	100	3
3	18ME103	Basic Mechanical and Civil Engineering	3	0	0	30	70	100	3
4	18EE201	Circuit Theory	3	0	0	30	70	100	3
5	18CS202	Data Structures	3	0	0	30	70	100	3
6	18BS107	Physics Lab	0	0	2	25	50	75	1
7	18ME104	Workshop Practice	0	0	2	25	50	75	1
8	18CS204	Data Structures Lab	0	0	4	25	50	75	2
		Total	**15**	**1**	**8**	**225**	**500**	**725**	**20**

B.Tech III Semester – Electronics & Communication Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18BS301	Complex Analysis	3	1	0	30	70	100	3
2	18EE304	Electrical Technology	3	0	0	30	70	100	3
3	18EC301	Electronic Devices and Circuits	3	0	0	30	70	100	3
4	18EC302	Probability Theory and Stochastic Processes	3	0	0	30	70	100	3
5	18EC303	Signals and Systems	3	0	0	30	70	100	3
6	18BS303	Managerial Economics and Financial Analysis	2	0	0	30	70	100	2
7	18EE307	Electrical Technology Lab	0	0	2	25	50	75	1
8	18EC306	Electronic Devices and Circuits Lab	0	0	2	25	50	75	1
9	18EC307	Signals and Systems Lab	0	0	2	25	50	75	1
Non-Credit Courses									
10	18AS301	Professional Society Activities-I	2	0	0	0	0	0	0
11	18AS302	Soft Skills Practice	0	0	2	0	0	0	0
12	18MD301	Environmental Sciences (Mandatory Course)	2	0	0	0	0	0	0
		Total	**21**	**1**	**8**	**255**	**570**	**825**	**20**

B.Tech IV Semester – Electronics & Communication Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18EC401	Switching Theory and Logic Design	3	1	0	30	70	100	3
2	18EC402	Pulse and Digital Circuits	3	0	0	30	70	100	3
3	18EC403	Analog Circuit Analysis	3	0	0	30	70	100	3
4	18EC404	Electromagnetic Theory and Transmission Lines	3	0	0	30	70	100	3
5	18EC405	Analog Communication	3	0	0	30	70	100	3
6	18ME306	Management Science	2	0	0	30	70	100	2
7	18EC407	Analog Circuit Analysis Lab	0	0	2	25	50	75	1
8	18EC408	Analog Communication Lab	0	0	2	25	50	75	1
9	18EC409	Pulse and Digital Circuits Lab	0	0	2	25	50	75	1
10	18EC410	Technical Seminar	0	2	0	50	-	50	1
Non-Credit Courses									
11	18AS401	Professional Society Activities-II	2	0	0	0	0	0	0
12	18AS402	Communication Skills Practice	2	0	0	0	0	0	0
		Total	**21**	**3**	**6**	**305**	**570**	**875**	**21**

B.Tech V Semester – Electronics & Communication Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18EC501	Linear Integrated Circuits and Applications	3	1	0	30	70	100	3
2	18EC502	Digital IC System Design	3	0	0	30	70	100	3
3	18EC503	Linear Control Systems	3	0	0	30	70	100	3
4	18EC504	Digital Communication	3	0	0	30	70	100	3
5	18EC505	Microprocessors and Microcontrollers	3	0	0	30	70	100	3
6	**Open Elective-I**		2	0	0	30	70	100	2
7	18EC511	Linear & Digital IC Applications Lab	0	0	2	25	50	75	1
8	18EC512	Digital Communication Lab	0	0	2	25	50	75	1
9	18EC513	Microprocessors and Microcontrollers Lab	0	0	2	25	50	75	1
Non-Credit Courses									
10	18AS501	Professional Society Activities-III	2	0	0	0	0	0	0
11	18AS502	Quantitative Aptitude	2	0	0	0	0	0	0
12	18MD501	Indian Constitution (Mandatory Course)	2	0	0	0	0	0	0
		Total	**23**	**1**	**6**	**255**	**570**	**825**	**20**

B.Tech VI Semester – Electronics & Communication Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18EC601	VLSI Design	3	1	0	30	70	100	3
2	18EC602	Antennas and Wave Propagation	3	0	0	30	70	100	3
3	18EC603	Embedded Systems	3	0	0	30	70	100	3
4	18EC604	Digital Signal Processing	3	0	0	30	70	100	3
5	**Elective-I**								
	18EC605	Digital Television	3	0	0	30	70	100	3
	18EC606	Computer Networks							
	18EC607	Electronic Measurements and Instrumentation							
	18EC608	Available MOOCs/ 12 week NPTEL courses suggested by the department							
6	**Open Elective-II**		2	0	0	30	70	100	2
7	18EC612	DSP Lab	0	0	2	25	50	75	1
8	18EC613	Embedded Systems Lab	0	0	2	25	50	75	1
9	18EC614	VLSI Design Lab	0	0	2	25	50	75	1
10	18EC615	Term Paper	0	2	0	50	-	50	1
Non-Credit Courses									
11	18AS601	Professional Society Activities-IV	2	0	0	0	0	0	0
12	18AS602	Technical Aptitude	2	0	0	0	0	0	0
		Total	**21**	**3**	**6**	**305**	**570**	**875**	**21**

B.Tech VII Semester – Electronics & Communication Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18EC701	Internet of Things (IOT)	3	1	0	30	70	100	3
2	18EC702	Microwave Engineering	3	0	0	30	70	100	3
3	**Open Elective-III**		2	0	0	30	70	100	2
4	**Elective-II**								
	18EC707	DSP Processors and Architectures	3	0	0	30	70	100	3
	18EC708	Wireless Communications and Networks							
	18EC709	Neural Network and Fuzzy Logic							
	18EC710	Available MOOCs							
5	**Elective-III**								
	18EC711	Optical Communications	3	0	0	30	70	100	3
	18EC712	Digital Design through HDL							
	18EC713	Image and video Processing							
	18EC714	Available MOOCs/ 12 week NPTEL courses suggested by the department							
6	18EC715	Internet of Things (IOT) Lab	0	0	2	25	50	75	1
7	18EC716	Microwave Engineering Lab	0	0	2	25	50	75	1
8	18EC717	Project Work Phase-I	0	0	4	50	50	100	2
9	18EC718	Comprehensive Assessment	0	0	2	100	-	100	1
Non-Credit Course									
10	18MD701	Essence of Indian Traditional Knowledge (Mandatory Course)	2	0	0	0	0	0	0
		Total	**16**	**1**	**10**	**350**	**500**	**850**	**19**

B.Tech VIII Semester – Electronics & Communication Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	**Elective-IV**								
	18EC801	Cellular and Mobile Communication	3	1	0	30	70	100	3
	18EC802	Virtual Instrumentation							
	18EC803	ASIC Design							
	18EC804	Available MOOCs							
2	**Elective-V**								
	18EC805	Satellite Communications	3	0	0	30	70	100	3
	18EC806	Micro Electro Mechanical Systems							
	18EC807	Software Defined Radio							
	18EC808	Available MOOCs							
3	**Elective-VI**								
	18EC809	Radar Engineering	3	0	0	30	70	100	3
	18EC810	Robotics and Automation							
	18EC811	Multimedia Communications							
	18EC812	Available MOOCs/ 12 week NPTEL courses suggested by the department							
4	18EC813	Project Work Phase-II/ Internship	0	0	20	60	140	200	10
		Total	**9**	**1**	**20**	**150**	**350**	**500**	**19**

Open Electives –Electronics & Communication Engineering

S.No	Code	Course
OPEN ELECTIVE-I		
1	18EC506	Principles of Modern Communication Systems
2	18EC507	Nano Electronics
3	18EC508	Micro Controller Applications
OPEN ELECTIVE-II		
4	18EC609	Biomedical Electronics
5	18EC610	Consumer Electronics
6	18EC611	Display Systems
OPEN ELECTIVE-III		
7	18EC703	Fundamentals Of Image Processing
8	18EC704	Biomedical Instrumentation
9	18EC705	Fundamentals Of Embedded Systems
10	18EC706	Wavelets

B.Tech I Semester – Computer Science & Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18MD101	Induction Training – 3 weeks (Mandatory Course)	-	-	-	-	-	-	-
2	18BS101	Mathematics-I	3	1	0	30	70	100	4
3	18BS102	Applied Physics	3	0	0	30	70	100	3
4	18ME103	Basic Mechanical and Civil Engineering	3	0	0	30	70	100	3
5	18EE101	Basic Electrical Engineering	3	0	0	30	70	100	3
6	18CS101	Programming for Problem Solving	3	0	0	30	70	100	3
7	18BS107	Physics Lab	0	0	2	25	50	75	1
8	18ME104	Workshop Practice	0	0	2	25	50	75	1
9	18CS102	Programming for Problem Solving Lab	0	0	4	25	50	75	2
		Total	**15**	**1**	**8**	**225**	**500**	**725**	**20**

B.Tech II Semester – Computer Science & Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18BS201	Mathematics-II	3	1	0	30	70	100	4
2	18BS103	Applied Chemistry	3	0	0	30	70	100	3
3	18BS104	English	3	0	0	30	70	100	3
4	18ME102	Engineering Graphics	1	0	4	30	70	100	3
5	18CS202	Data Structures	3	0	0	30	70	100	3
6	18BS108	Chemistry Lab	0	0	2	25	50	75	1
7	18BS109	English Lab	0	0	2	25	50	75	1
8	18CS204	Data Structures Lab	0	0	4	25	50	75	2
		Total	**13**	**1**	**12**	**225**	**500**	**725**	**20**

B.Tech III Semester – Computer Science & Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18EC304	Electronic Devices	3	0	0	30	70	100	3
2	18EC305	Digital Logic Design	3	0	0	30	70	100	3
3	18CS301	Mathematical Foundations for Computer Science	3	1	0	30	70	100	3
4	18CS302	Object Oriented Programming Through C++	3	0	0	30	70	100	3
5	18CS303	Design and Analysis Of Algorithms	3	0	0	30	70	100	3
6	18ME306	Management Science	2	0	0	30	70	100	2
7	18EC308	Electronic Devices Lab	0	0	2	25	50	75	1
8	18CS304	Unix Shell Programming Lab	0	0	2	25	50	75	1
9	18CS305	C++ Lab	0	0	2	25	50	75	1
Non-Credit Courses									
10	18AS301	Professional Society Activities-I	2	0	0	0	0	0	0
11	18AS302	Soft Skills Practice	0	0	2	0	0	0	0
12	18MD301	Environmental Sciences (Mandatory Course)	2	0	0	0	0	0	0
		Total	**21**	**1**	**8**	**255**	**570**	**825**	**20**

B.Tech IV Semester – Computer Science & Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18BS401	Probability and Statistics	3	1	0	30	70	100	3
2	18CS401	Database Management Systems	3	0	0	30	70	100	3
3	18CS402	Java Programming	3	0	0	30	70	100	3
4	18CS403	Software Engineering	3	0	0	30	70	100	3
5	18CS404	Computer Organization	3	0	0	30	70	100	3
6	18BS303	Managerial Economics and Financial Analysis	2	0	0	30	70	100	2
7	18CS405	Java Programming Lab	0	0	2	25	50	75	1
8	18CS406	Database Management Systems Lab	0	0	2	25	50	75	1
9	18CS407	Software Engineering Lab	0	0	2	25	50	75	1
10	18CS408	Technical Seminar	0	2	0	50	-	50	1
Non-Credit Courses									
11	18AS401	Professional Society Activities-II	2	0	0	0	0	0	0
12	18AS402	Communication Skills Practice	0	0	2	0	0	0	0
		Total	**19**	**3**	**8**	**305**	**570**	**875**	**21**

B.Tech V Semester – Computer Science & Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18EC510	Microprocessors	3	0	0	30	70	100	3
2	18CS501	Formal Languages and Automata Theory	3	1	0	30	70	100	3
3	18CS502	Computer Networks	3	0	0	30	70	100	3
4	18CS503	Operating Systems	3	0	0	30	70	100	3
5	18CS504	Web Technologies	3	0	0	30	70	100	3
6	**Open Elective-I**		2	0	0	30	70	100	2
7	18CS510	Computer Networks Lab	0	0	2	25	50	75	1
8	18CS511	Web Technologies Lab	0	0	2	25	50	75	1
9	18CS512	Operating Systems Lab	0	0	2	25	50	75	1
Non-Credit Courses									
10	18AS501	Professional Society Activities-III	2	0	0	0	0	0	0
11	18AS502	Quantitative Aptitude	2	0	0	0	0	0	0
12	18MD501	Indian Constitution (Mandatory Course)	2	0	0	0	0	0	0
		Total	**23**	**1**	**6**	**255**	**570**	**825**	**20**

B.Tech VI Semester – Computer Science & Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18CS601	Python Programming	3	1	0	30	70	100	3
2	18CS602	Cryptography and Network Security	3	0	0	30	70	100	3
3	18CS603	Compiler Design	3	0	0	30	70	100	3
4	18CS604	Data Warehousing and Data Mining	3	0	0	30	70	100	3
5	**Elective-I**								
	18CS605	Computer Graphics	3	0	0	30	70	100	3
	18CS606	Systems Programming							
	18CS607	Principles of Programming							
	18CS608	Available MOOCs/ 12 week NPTEL courses suggested by the department							
6	**Open Elective-II**		2	0	0	30	70	100	2
7	18CS614	Python Programming Lab	0	0	2	25	50	75	1
8	18CS615	Compiler Design Lab	0	0	2	25	50	75	1
9	18CS616	Data Warehousing and Data Mining Lab	0	0	2	25	50	75	1
10	18CS617	Term Paper	0	2	0	50	-	50	1
Non-Credit Courses									
11	18AS601	Professional Society Activities-IV	2	0	0	0	0	0	0
12	18AS602	Technical Aptitude	2	0	0	0	0	0	0
		Total	**21**	**3**	**6**	**305**	**570**	**875**	**21**

B.Tech VII Semester – Computer Science & Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18CS701	Mobile App Development	3	1	0	30	70	100	3
2	18CS702	Big Data Analytics	3	0	0	30	70	100	3
3	**Open Elective-III**		2	0	0	30	70	100	2
4	**Elective-II**								
	18CS708	Artificial Intelligence	3	0	0	30	70	100	3
	18CS709	Multimedia Systems							
	18CS710	Machine Learning							
	18CS711	Available MOOCs							
5	**Elective-III**								
	18CS712	Software Testing	3	0	0	30	70	100	3
	18CS713	Advanced Computer Architecture							
	18CS714	Cloud Computing							
	18CS715	Available MOOCs/ 12 week NPTEL courses suggested by the department							
6	18CS716	Mobile App Development Lab	0	0	2	25	50	75	1
7	18CS717	Big Data Analytics Lab	0	0	2	25	50	75	1
8	18CS718	Project Work Phase-I	0	0	4	50	50	100	2
9	18CS719	Comprehensive Assessment	0	0	2	100	-	100	1
Non-Credit Course									
10	18MD701	Essence of Indian Traditional Knowledge (Mandatory Course)	2	0	0	0	0	0	0
		Total	**16**	**1**	**10**	**350**	**500**	**850**	**19**

B.Tech VIII Semester – Computer Science & Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	**Elective-IV**								
	18CS801	Wireless and Sensor Networks	3	1	0	30	70	100	3
	18CS802	Image Processing							
	18CS803	Soft Computing							
	18CS804	Available MOOCs							
2	**Elective-V**								
	18CS805	Service Oriented Architecture	3	0	0	30	70	100	3
	18CS806	Cyber Security							
	18CS807	Distributed Computing							
	18CS808	Available MOOCs							
3	**Elective-VI**								
	18CS809	Internet of Things	3	0	0	30	70	100	3
	18CS810	Software Project Management							
	18CS811	Information Security and Auditing							
	18CS812	Available MOOCs/ 12 week NPTEL courses suggested by the department							
4	18CS813	Project Work Phase-II/ Internship	0	0	20	60	140	200	10
		Total	**9**	**1**	**20**	**150**	**350**	**500**	**19**

Open Electives –Computer Science & Engineering

S.No	Code	Course
OPEN ELECTIVE-I		
1	18CS505	Operating Systems
2	18CS506	OOPS Through Java
3	18CS507	Unix And Shell Programming
4	18CS508	Web Page Design
5	18CS509	Advanced Data Structures
OPEN ELECTIVE-II		
6	18CS609	Python Programming
7	18CS610	Artificial Intelligence
8	18CS611	Software Engineering
9	18CS612	Web Technologies
10	18CS613	Data Base Management Systems
OPEN ELECTIVE-III		
11	18CS703	Mobile Application Development
12	18CS704	R Programming
13	18CS705	Big Data Analytics
14	18CS706	Machine Learning
15	18CS707	Data Warehousing and Data Mining

ITEM-IX

Review and Approval of the course titles and content of all PG (M.Tech) programmes under R18 regulations.

Resolution No : 9/ACC-7

ACC has unanimously approved course titles and content of all PG (M.Tech) programmes under R18 regulations with the following suggestions.

Members reviewed the course titles and content of all PG (M.Tech) programmes under R18 regulations as follows:

M.Tech I Semester – Structural Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18ST101	Advanced Structural Analysis	4	0	0	40	60	100	4
2	18ST102	Theory of Elasticity and Plasticity	4	0	0	40	60	100	4
3	**Elective-I**								
	18ST103	Theory and Analysis of Plates	4	0	0	40	60	100	4
	18ST104	Maintenance and Rehabilitation of Structures							
	18ST105	Stability of Structures							
4	**Elective-II**								
	18ST106	Soil Structure Interaction	4	0	0	40	60	100	4
	18ST107	Bridge Engineering							
	18ST108	Prefabricated Structures							
5	18AS101	Research Methodology and IPR	2	0	0	40	60	100	2
6	18ST110	Concrete Technology Lab-I	0	0	4	25	50	75	2
7	18ST111	Computational Lab	0	0	4	25	50	75	2
		Total	**18**	**0**	**8**	**250**	**400**	**650**	**22**

M.Tech II Semester – Structural Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18ST201	Finite Element Method	4	0	0	40	60	100	4
2	18ST202	Structural Dynamics	4	0	0	40	60	100	4
3	**Elective-III**								
	18ST203	Advanced Steel Design	4	0	0	40	60	100	4
	18ST204	Earthquake Resistant Structures							
	18ST205	Design of High rise structures							
4	**Elective-IV**								
	18ST206	Design of Advanced Concrete Structures	4	0	0	40	60	100	4
	18ST207	Design of Industrial Structure							
	18ST208	Advanced Foundation Engineering							
5	18ST209	Concrete technology Lab-II	2	0	0	40	60	100	2
6	18ST210	Structural Engineering Lab	0	0	4	25	50	75	2
7	18ST211	Term Paper	0	0	4	50	-	50	2
		Total	**18**	**0**	**8**	**275**	**350**	**625**	**22**

M.Tech III Semester – Structural Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1		**Open Elective**	4	0	0	40	60	100	4
2	**Elective-V**								
	18ST304	Design of Prestressed Concrete Structures	4	0	0	40	60	100	4
	18ST305	Analysis of Shells and Folded Plates							
	18ST306	Available MOOCS							
3	18ST307	Project Work Phase-I	0	0	20	Grade			10
		Total	**8**	**0**	**8**	**80**	**120**	**200**	**18**

M.Tech IV Semester – Structural Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18ST401	Project Work Phase-II	0	0	32	Grade			16
		Total	**0**	**0**	**32**	**Grade**			**16**

Open Electives – Structural Engineering

S.No	Course Code	Course Title
1	18ST301	Waste to Energy
2	18ST302	Cost Management of Engineering Projects
3	18ST303	Composite Materials

M.Tech I Semester – Electrical Power Systems

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18EP101	Modern Control Theory	4	0	0	40	60	100	4
2	18EP102	Advanced Computer Methods in Power Systems	4	0	0	40	60	100	4
3	**Elective-I**								
	18EP103	Principles of power quality	4	0	0	40	60	100	4
	18EP104	EHVAC Transmission							
	18EP105	Reactive Power Compensation and Management							
4	**Elective-II**								
	18EP106	Advanced Digital Signal Processing	4	0	0	40	60	100	4
	18EP107	Advanced Microprocessors and Microcontrollers							
	18EP108	Restructured Power Systems							
5	18AS101	Research Methodology and IPR	2	0	0	40	60	100	2
6	18EP110	Power Systems Lab	0	0	4	25	50	75	2
7	18EP111	Power systems Simulation-I Lab	0	0	4	25	50	75	2
		Total	**18**	**0**	**8**	**250**	**400**	**650**	**22**

M.Tech II Semester – Electrical Power Systems

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18EP201	Flexible AC Transmission Systems	4	0	0	40	60	100	4
2	18EP202	Advanced Power System Protection	4	0	0	40	60	100	4
3	**Elective-III**								
	18EP203	Distributed Generation	4	0	0	40	60	100	4
	18EP204	Renewable Energy Systems							
	18EP205	Energy Auditing, Conversation and Management							
4	**Elective-IV**								
	18EP206	Programmable Logic Controllers and applications	4	0	0	40	60	100	4
	18EP207	Smart Grid							
	18EP208	Artificial Intelligence Computing Techniques and Applications							
5	18EP209	Renewable Energy Systems Lab	2	0	0	40	60	100	2
6	18EP210	Simulation Lab-II	0	0	4	25	50	75	2
7	18EP211	Term Paper	0	0	4	50	-	50	2
		Total	**18**	**0**	**8**	**275**	**350**	**625**	**22**

M.Tech III Semester – Electrical Power Systems

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1		**Open Elective**	4	0	0	40	60	100	4
2	**Elective-V**								
	18EP304	Power System Voltage Stability	4	0	0	40	60	100	4
	18EP305	Distribution Automation							
	18EP306	Power System Dynamics and Control							
3	18EP307	Project Work Phase-I	0	0	20	Grade			10
		Total	**8**	**0**	**8**	**80**	**120**	**200**	**18**

M.Tech IV Semester – Electrical Power Systems

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18EP401	Project Work Phase-II	0	0	32	Grade			16
		Total	**0**	**0**	**32**	**Grade**			**16**

Open Electives – Electrical Power Systems

S.No	Course Code	Course Title
1	18EP301	Hybrid Electric Vehicles
2	18EP302	Power Distribution Systems
3	18EP303	Available MOOCs

M.Tech I Semester – Power Electronics

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18PE101	Modern Control Theory	4	0	0	40	60	100	4
2	18PE102	Electric Drives-I	4	0	0	40	60	100	4
3	**Elective-I**								
	18PE103	Machine Modelling and Analysis	4	0	0	40	60	100	4
	18PE104	Power Electronic Converters							
	18PE105	HVDC Transmission							
4	**Elective-II**								
	18PE106	Advanced Digital Signal Processing	4	0	0	40	60	100	4
	18PE107	Advanced Microprocessors and Microcontrollers							
	18PE108	Digital Control Systems							
5	18AS101	Research Methodology and IPR	2	0	0	40	60	100	2
6	18PE110	Power Converters lab	0	0	4	25	50	75	2
7	18PE111	Simulation Lab-I	0	0	4	25	50	75	2
		Total	**18**	**0**	**8**	**250**	**400**	**650**	**22**

M.Tech II Semester – Power Electronics

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18PE201	Flexible AC Transmission Systems	4	0	0	40	60	100	4
2	18PE202	Electric Drives-II	4	0	0	40	60	100	4
3	**Elective-III**								
	18PE203	Distributed Generation	4	0	0	40	60	100	4
	18PE204	Renewable Energy Systems							
	18PE205	Energy Auditing, Conversation and Management							
4	**Elective-IV**								
	18PE206	Programmable Logic Controllers and applications	4	0	0	40	60	100	4
	18PE207	Smart Grid							
	18PE208	Artificial Intelligence Computing Techniques and Applications							
5	18PE209	Renewable Energy Systems Lab	0	0	4	40	60	100	2
6	18PE210	Simulation Lab-II	0	0	4	25	50	75	2
7	18PE211	Term Paper	0	0	4	50	-	50	2
		Total	**16**	**0**	**12**	**275**	**350**	**625**	**22**

M.Tech III Semester – Power Electronics

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1		**Open Elective**	4	0	0	40	60	100	4
2	**Elective-V**								
	18PE304	Advanced Power Electronic Converters	4	0	0	40	60	100	4
	18PE305	Switched Mode Power Supplies(SMPS)							
	18PE306	Special Machines							
3	18PE307	Project Work Phase-I	0	0	20	Grade			10
		Total	**8**	**0**	**8**	**80**	**120**	**200**	**18**

M.Tech IV Semester – Power Electronics

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18PE401	Project Work Phase-II	0	0	32	Grade			16
		Total	**0**	**0**	**32**	**Grade**			**16**

Open Electives – Power Electronics

S.No	Course Code	Course Title
1	18PE301	Hybrid Electric Vehicles
2	18PE302	Electric Traction systems
3	18PE303	Available MOOCs

M.Tech I Semester – Embedded Systems

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18ES101	Microcontrollers for Embedded System Design	4	0	0	40	60	100	4
2	18ES102	Embedded System Concepts	4	0	0	40	60	100	4
3	**Elective-I**								
	18ES103	VLSI Technology and Design	4	0	0	40	60	100	4
	18ES104	Embedded Computing							
	18ES105	Advanced Operating Systems							
4	**Elective-II**								
	18ES106	DSP Processors and Architectures	4	0	0	40	60	100	4
	18ES107	CMOS Digital Integrated Circuit Design							
	18ES108	Embedded C							
5	18AS101	Research Methodology and IPR	2	0	0	40	60	100	2
6	18ES110	Microcontrollers and Interfacing Lab	0	0	4	25	50	75	2
7	18ES111	VLSI Design Lab	0	0	4	25	50	75	2
		Total	**18**	**0**	**8**	**250**	**400**	**650**	**22**

M.Tech II Semester – Embedded Systems

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18ES201	FPGA Architecture and Applications	4	0	0	40	60	100	4
2	18ES202	Real Time Operating Systems	4	0	0	40	60	100	4
3	**Elective-III**								
	18ES203	System on Chip Architecture	4	0	0	40	60	100	4
	18ES204	Cryptography and Network Security							
	18ES205	Embedded Networks							
4	**Elective-IV**								
	18ES206	Hardware Software Co-Design	4	0	0	40	60	100	4
	18ES207	TCP / IP Internetworking							
	18ES208	Software Defines Radio							
5	18ES209	RTOS and FPGA Lab	2	0	0	40	60	100	2
6	18ES210	Advanced Embedded Systems Lab	0	0	4	25	50	75	2
7	18ES211	Term Paper	0	0	4	50	-	50	2
		Total	**18**	**0**	**8**	**275**	**350**	**625**	**22**

M.Tech III Semester – Embedded Systems

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1		**Open Elective**	4	0	0	40	60	100	4
2	**Elective-V**								
	18ES304	Advanced Computer Architecture	4	0	0	40	60	100	4
	18ES305	Robotic Technology							
	18ES306	Embedded Wireless Sensor Networks							
3	18ES307	Project Work Phase-I	0	0	20	Grade			10
		Total	**8**	**0**	**8**	**80**	**120**	**200**	**18**

M.Tech IV Semester – Embedded Systems

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18ES401	Project Work Phase-II	0	0	32	Grade			16
		Total	**0**	**0**	**32**	**Grade**			**16**

Open Electives – Embedded Systems

S.No	Course Code	Course Title
1	18ES304	Embedded Linux
2	18ES305	Fundamentals and Applications Of MEMS
3	18ES306	Available MOOCs

M.Tech I Semester – VLSI

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18VL101	CMOS Analog Integrated Circuit Design	4	0	0	40	60	100	4
2	18VL102	CMOS Digital Integrated Circuit Design	4	0	0	40	60	100	4
3	**Elective-I**								
	18VL103	Hardware Description Languages	4	0	0	40	60	100	4
	18VL104	VLSI Technology and Design							
	18VL105	ASIC Design							
4	**Elective-II**								
	18VL106	DSP Processors and Architectures	4	0	0	40	60	100	4
	18VL107	Scripting language for VLSI Design Automation							
	18VL108	Algorithms for VLSI Design Automation							
5	18AS101	Research Methodology and IPR	2	0	0	40	60	100	2
6	18VL110	CMOS Analog Integrated Circuit Design Lab	0	0	4	25	50	75	2
7	18VL111	CMOS Digital Integrated Circuit Design Lab	0	0	4	25	50	75	2
		Total	**18**	**0**	**8**	**250**	**400**	**650**	**22**

M.Tech II Semester – VLSI

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18VL201	Embedded System Concepts	4	0	0	40	60	100	4
2	18VL202	Device Modeling	4	0	0	40	60	100	4
3	**Elective-III**								
	18VL203	FPGA Architecture and Applications	4	0	0	40	60	100	4
	18VL204	Low Power VLSI Design							
	18VL205	Real Time Operating Systems							
4	**Elective-IV**								
	18VL206	Hardware Software Co-Design	4	0	0	40	60	100	4
	18VL207	Testing and Testability							
	18VL208	RFIC Design							
5	18VL209	Mixed Signal Lab	2	0	0	40	60	100	2
6	18VL210	Embedded Processing Lab	0	0	4	25	50	75	2
7	18VL211	Term Paper	0	0	4	50	-	50	2
		Total	**18**	**0**	**8**	**275**	**350**	**625**	**22**

M.Tech III Semester – VLSI

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1		**Open Elective**	4	0	0	40	60	100	4
2	**Elective-V**								
	18VL304	Advanced Computer Architecture	4	0	0	40	60	100	4
	18VL305	System On Chip Architecture							
	18VL306	Fundamentals and Applications of MEMS							
3	18VL307	Project Work Phase-I	0	0	20	Grade			10
		Total	**8**	**0**	**8**	**80**	**120**	**200**	**18**

M.Tech IV Semester – VLSI

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18VL401	Project Work Phase-II	0	0	32	Grade			16
		Total	**0**	**0**	**32**	**Grade**			**16**

Open Electives – VLSI

S.No	Course Code	Course Title
1	18VL301	High Speed VLSI
2	18VL302	Nano Electronics
3	18VL303	Available MOOCs

M.Tech I Semester – Computer Science & Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18CO101	Advanced Data Structures and Algorithms	4	0	0	40	60	100	4
2	18CO102	UML and Design Patterns	4	0	0	40	60	100	4
3	**Elective-I**								
	18CO103	Cryptanalysis	4	0	0	40	60	100	4
	18CO104	Adhoc Sensor Networks							
	18CO105	Image Processing							
4	**Elective-II**								
	18CO106	Cloud Computing	4	0	0	40	60	100	4
	18CO107	Soft Computing							
	18CO108	Advanced Data Mining							
5	18AS101	Research Methodology and IPR	2	0	0	40	60	100	2
6	18CO110	Advanced Data Structures And Algorithms Lab	0	0	4	25	50	75	2
7	18CO111	UML and Design Patterns Lab	0	0	4	25	50	75	2
		Total	**18**	**0**	**8**	**250**	**400**	**650**	**22**

M.Tech II Semester – Computer Science & Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18CO201	Big Data Analytics	4	0	0	40	60	100	4
2	18CO202	Mobile Application Development	4	0	0	40	60	100	4
3	**Elective-III**								
	18CO203	Elliptic Curve Cryptography	4	0	0	40	60	100	4
	18CO204	Computer Vision							
	18CO205	Software Oriented Architecture							
4	**Elective-IV**								
	18CO206	Internet Of Things	4	0	0	40	60	100	4
	18CO207	Information Retrieval							
	18CO208	Advanced Computer Architecture							
5	18CO209	Mobile Application Development Lab	2	0	0	40	60	100	2
6	18CO210	Big Data Analytics Lab	0	0	4	25	50	75	2
7	18CO211	Term Paper	0	0	4	50	-	50	2
		Total	**18**	**0**	**8**	**275**	**350**	**625**	**22**

M.Tech III Semester – Computer Science & Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1		**Open Elective**	4	0	0	40	60	100	4
2	**Elective-V**								
	18CO304	Machine Learning	4	0	0	40	60	100	4
	18CO305	High Performance Computing							
	18CO306	Information Security and Auditing							
3	18CO307	Project Work Phase-I	0	0	20	Grade			10
		Total	**8**	**0**	**8**	**80**	**120**	**200**	**18**

M.Tech IV Semester – Computer Science & Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18CO401	Project Work Phase-II	0	0	32	Grade			16
		Total	**0**	**0**	**32**	**Grade**			**16**

Open Electives – Computer Science & Engineering

S.No	Course Code	Course Title
1	18CO301	Business Analytics
2	18CO302	Operations Research
3	18CO303	Cost Management of Engineering projects

M.Tech I Semester – Software Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18SE101	Advanced Data Structures and Algorithms	4	0	0	40	60	100	4
2	18SE102	Object Oriented Software Engineering	4	0	0	40	60	100	4
3	**Elective-I**								
	18SE103	Artificial Intelligence	4	0	0	40	60	100	4
	18SE104	Cloud Computing							
	18SE105	Software Project Management							
4	**Elective-II**								
	18SE106	Middleware Technologies	4	0	0	40	60	100	4
	18SE107	Software Reliability							
	18SE108	Data Analytics							
5	18AS101	Research Methodology and IPR	2	0	0	40	60	100	2
6	18SE110	Advanced Data Structures And Algorithms Lab	0	0	4	25	50	75	2
7	18SE111	Web Technologies Lab	0	0	4	25	50	75	2
		Total	**18**	**0**	**8**	**250**	**400**	**650**	**22**

M.Tech II Semester – Software Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18SE201	Software Architecture And Design Patterns	4	0	0	40	60	100	4
2	18SE202	Software Testing	4	0	0	40	60	100	4
3	**Elective-III**								
	18SE203	Software Quality Assurance	4	0	0	40	60	100	4
	18SE204	Secure Software Engineering							
	18SE205	Grid Computing Techniques							
4	**Elective-IV**								
	18SE206	Internet of Things	4	0	0	40	60	100	4
	18SE207	Distributing Computing							
	18SE208	Knowledge Engineering							
5	18SE209	Design Patterns Lab	2	0	0	40	60	100	2
6	18SE210	Software Testing Lab	0	0	4	25	50	75	2
7	18SE211	Term Paper	0	0	4	50	-	50	2
		Total	**18**	**0**	**8**	**275**	**350**	**625**	**22**

M.Tech III Semester – Software Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1		Open Elective	4	0	0	40	60	100	4
2	Elective-V								
	18SE304	Advanced Web Technologies	4	0	0	40	60	100	4
	18SE305	Service Oriented Architecture							
	18SE306	Machine Learning							
3	18SE307	Project Work Phase-I	0	0	20	Grade			10
		Total	**8**	**0**	**8**	**80**	**120**	**200**	**18**

M.Tech IV Semester – Software Engineering

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18SE401	Project Work Phase-II	0	0	32	Grade			16
		Total	**0**	**0**	**32**	**Grade**			**16**

Open Electives – Software Engineering

S.No	Course Code	Course Title
1	18SE301	Business Analytics
2	18SE302	Operations Research
3	18SE303	Cost Management of Engineering projects

ITEM-X

Review and Approval of the course titles and content of MBA programme under R18 regulations.

Resolution No : 10/ACC-7

ACC has unanimously approved course titles and content of MBA programme under R18 regulations with the following suggestions.

Members reviewed the course titles and content of all MBA programme under R18 regulations as follows:

MBA I Semester

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18MB101	Management and organizational Behavior	4	0	0	40	60	100	4
2	18MB102	Business Environment & Laws	4	0	0	40	60	100	4
3	18MB103	Managerial Economics	4	0	0	40	60	100	4
4	18MB104	Soft Skills for Managers	4	0	0	40	60	100	4
5	18MB105	Accounting for Managers	4	0	0	40	60	100	4
6	18MB106	Statistical Techniques	4	0	0	40	60	100	4
7	18MB107	IT Lab for Managers	0	0	4	25	50	75	2
		Total	**24**	**0**	**4**	**265**	**410**	**675**	**26**

MBA II Semester

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18MB201	Human Resource Management	4	0	0	40	60	100	4
2	18MB202	Financial Management	4	0	0	40	60	100	4
3	18MB203	Marketing Management	4	0	0	40	60	100	4
4	18MB204	Production and Operations Management	4	0	0	40	60	100	4
5	18MB205	Operations research	4	0	0	40	60	100	4
6	18MB206	Business Research Methods	4	0	0	40	60	100	4
7	18MB207	Business Simulation Lab	0	0	4	25	50	75	2
		Total	**24**	**0**	**4**	**265**	**410**	**675**	**26**

MBA III Semester

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18MB301	Business Ethics and Corporate Governance	4	0	0	40	60	100	4
2	18MB302	Entrepreneurship Development	4	0	0	40	60	100	4
3	**Elective-I**								
	18MB303	Financial Institutions, Market and Services	4	0	0	40	60	100	4
	18MB304	Consumer Behaviour							
	18MB305	Industrial Relations and Labour Laws							
	18MB306	Mobile Commerce							
	18MB307	Port Operations and Terminal Management							
4	**Elective-II**								
	18MB308	Security Analysis and Portfolio Management	4	0	0	40	60	100	4
	18MB309	Services Marketing							
	18MB310	Human Resource Development							
	18MB311	Management of Software Project							
	18MB312	Ware house Management							
5	**Elective-III**								
	18MB313	Risk and Insurance Management	4	0	0	40	60	100	4
	18MB314	Sales and Distribution Management							
	18MB315	Strategic Human Resource Management							
	18MB316	Enterprises Resource Planning							
	18MB317	Port Security Management, Safety and Environment							
6	**Elective-IV**								
	18MB318	Business Taxation	4	0	0	40	60	100	4
	18MB319	Logistics and Supply Chain Management							
	18MB320	Leadership and team building							
	18MB321	Data warehousing and Data mining							
	18MB322	Container Operations Management							
7	18MB324	Rural-Community Internship	0	0	8	40	60	100	4
		Total	**24**	**0**	**8**	**280**	**420**	**700**	**28**

MBA IV Semester

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18MB401	Strategic Management	4	0	0	40	60	100	4
2	18MB402	Business Analytics	4	0	0	40	60	100	4
3	**Elective-V**								
	18MB403	Financial Derivatives	4	0	0	40	60	100	4
	18MB404	Customer Relationship management							
	18MB405	Performance and Compensation Management							
	18MB406	Data Communication and Network Security							
	18MB407	Cargo operations Management							
4	**Elective-VI**								
	18MB408	International Financial Management	4	0	0	40	60	100	4
	18MB409	Brand and Advertising Management							
	18MB410	International Human Resource Management							
	18MB411	Corporate Information Management							
	18MB412	Marine operations Management							
5	18MB413	Seminar	0	4	0	50	-	50	2
6	18MB414	Project Work	0	0	20	80	120	200	10
		Total	**12**	**4**	**20**	**290**	**360**	**650**	**28**

ITEM-XI

Review and Approval of the course titles and content of MCA programme under R18 regulations.

Resolution No : 11/ACC-7

ACC has unanimously approved course titles and content of MCA programme under R18 regulations with the following suggestions.

Members reviewed the course titles and content of all MCA programme under R18 regulations as follows:

MCA I Semester

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18MC101	Problem Solving and Programming	4	0	0	40	60	100	4
2	18MC102	Computer Organization	4	0	0	40	60	100	4
3	18MC103	Discrete Structures and Graph Theory	4	0	0	40	60	100	4
4	18MC104	Probability and Statistics	4	0	0	40	60	100	4
5	18MC105	Accounting and Financial Management	4	0	0	40	60	100	4
6	18MC106	C Programming Lab	0	0	4	25	50	75	2
7	18MC107	Computer Organization Lab	0	0	4	25	50	75	2
		Total	**20**	**0**	**8**	**250**	**400**	**650**	**24**

MCA II Semester

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18MC201	Operating Systems	4	0	0	40	60	100	4
2	18MC202	OOPs through C++	4	0	0	40	60	100	4
3	18MC203	Data Structures	4	0	0	40	60	100	4
4	18MC204	Principles of Programming Languages	4	0	0	40	60	100	4
5	18MC205	Organization Structures and Personnel Management	4	0	0	40	60	100	4
6	18MC206	C++ Programming Lab	0	0	4	25	50	75	2
7	18MC207	Data Structures Lab	0	0	4	25	50	75	2
8	18AS201	Soft Skills Practice	0	0	0	0	0	0	0
		Total	**20**	**0**	**8**	**250**	**400**	**650**	**24**

MCA III Semester

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18MC301	Database Management Systems	4	0	0	40	60	100	4
2	18MC302	Java Programming	4	0	0	40	60	100	4
3	18MC303	Design and Analysis of Algorithms	4	0	0	40	60	100	4
4	18MC304	Software Engineering	4	0	0	40	60	100	4
5	18MC305	Data Communications and Computer Networks	4	0	0	40	60	100	4
6	18MC306	Database Management Systems Lab	0	0	4	25	50	75	2
7	18MC307	JAVA Programming Lab	0	0	4	25	50	75	2
Non-Credit Course									
8	18AS301	Communication Skills Practice	0	0	2	0	0	0	0
Total			**20**	**0**	**10**	**250**	**400**	**650**	**24**

MCA IV Semester

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18MC401	Object Oriented Analysis and Design	4	0	0	40	60	100	4
2	18MC402	Advanced JAVA Programming	4	0	0	40	60	100	4
3	18MC403	Data Warehousing and Data Mining	4	0	0	40	60	100	4
4	**Elective-I**								
	18MC404	Cyber Security	4	0	0	40	60	100	4
	18MC405	Advanced Databases							
	18MC406	Information Retrieval Systems							
5	**Elective-II**								
	18MC407	UNIX and Shell Programming	4	0	0	40	60	100	4
	18MC408	Artificial Intelligence							
	18MC409	Wireless Networks							
6	18MC410	Advanced JAVA Programming Lab	0	0	4	25	50	75	2
7	18MC411	Data Mining and OOAD Lab	0	0	4	25	50	75	2
Non-Credit Course									
8	18AS401	Quantitative Aptitude	2	0	0	0	0	0	0
		Total	**22**	**0**	**8**	**250**	**400**	**650**	**24**

MCA V Semester

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18MC501	Android Application Development	4	0	0	40	60	100	4
2	18MC502	Big Data Analytics	4	0	0	40	60	100	4
3	18MC503	Software Testing	4	0	0	40	60	100	4
4	**Elective-III**								
	18MC504	Software Project Management	4	0	0	40	60	100	4
	18MC505	Machine Learning							
	18MC506	Cloud Computing							
5	**Elective-IV**								
	18MC507	Natural Language Processing	4	0	0	40	60	100	4
	18MC508	Software Quality Assurance							
	18MC509	Middleware Technologies							
6	18MC510	Android Application Development Lab	0	0	4	25	50	75	2
7	18MC511	Big Data Lab	0	0	4	25	50	75	2
8	18MC212	Seminar	0	0	4	50	-	50	2
Non-Credit Course									
9	18AS501	Technical Aptitude	2	0	0	0	0	0	0
		Total	**22**	**0**	**12**	**300**	**400**	**700**	**26**

MCA VI Semester

S.No	Course Code	Course Title	Hours per Week			Marks			Credits
			L	T	P	IM	EM	T	
1	18MC601	Project Work	0	0	20	Grade			10
		Total	**0**	**0**	**20**	**Grade**			**10**

ITEM-XII

Review and Approval of the syllabus for III B.Tech (CE, EEE, ME, ECE & CSE) 5th and 6th Semesters for R16 Regulations.

Resolution No :12/ACC-7

ACC has unanimously approved the syllabus for III B.Tech (CE, EEE, ME, ECE & CSE) 5th and 6th Semesters for R16 Regulations with the following suggestions.

Members reviewed the syllabus for III B.Tech (CE, EEE, ME, ECE & CSE) 5th and 6th Semesters for R16 Regulations as follows:

ANNEXURE-I

ITEM-XIII

Review and Approval of the syllabus for IV B.Tech (CE, EEE, ME, ECE & CSE) 7th and 8th Semesters for R16 Regulations.

Resolution No : 13/ACC-7

ACC has unanimously approved the syllabus for IV B.Tech (CE, EEE, ME, ECE & CSE) 7th and 8th Semesters for R16 Regulations with the following suggestions.

Members reviewed the syllabus for IV B.Tech (CE,E EE, ME, ECE & CSE) 7th and 8th Semesters for R16 Regulations as follows:

ANNEXURE-I I

MEMBERS PRESENT:

S.No.	Name	Designation	Affiliation	Signature
1	Prof.K.Dhanunjaya	Chairman	Principal, ASCET, Gudur	
2	Prof.T.Venu Madhav	Member	Head, Dept, of Civil Engg., ASCET, Gudur	
3	Prof.P.V.V.S.Srinivas	Member	Head, Dept, of CSE Engg., ASCET, Gudur	
4	Prof.J.Suresh	Member	Head, Dept, of EEE Engg., ASCET, Gudur	
5	Prof.K.Dhanumjaya	Member	Head, Dept, of ECE Engg., ASCET, Gudur	
6	Prof. M.Vamsi krishna	Member	Head, Dept, of ME Engg., ASCET, Gudur	
7	Prof.M.Rajaiah	Member	Head, Dept, of H&S Engg., ASCET, Gudur	
8	Prof.G.Suresh Kumar	Member	CoE & Professor in ME ASCET, Gudur	
9	Prof. A.M.Mahaboob Basha	Member	Head, Dept, of MBA Engg., ASCET, Gudur	
10	Prof.V.Chandra Sekhar	Member	Head, Dept, of MCA Engg., ASCET, Gudur	
11	Dr.A.Immanuel	Member	Associate Prof, Dept. of EEE, ASCET, Gudur	
12	Dr.Ch.Madhuramma	Member	Associate Prof, Dept. of CE, ASCET, Gudur	
13	Mr.J.Amarendra	Member	Associate Prof, Dept. of ECE, ASCET, Gudur	
14	Prof.M.Vijaya Kumar	Ex-Officio Member	Director, Academics and Planning, JNTUA Ananthapuram	
15	Prof.S.V.Satyanarayana	Ex-Officio Member	Director of Evaluation JNTUA Ananthapuram	
16	Prof V.Sankar	Member	Professor in EEE Department, JNTUA, Ananthapuramu	

17	Dr.S.V.Ramana	Member	Principal, Vasavi Engineering College	
18	Dr.K.Ramji	Member	Professor, Department of ME, AUCE, Vizag	Absent
19	Sri.B.V.Subba Rao	Member	General Manager, SDSC SHAAR Sriharikota	
20	Sri. P.Vijaya Kumar Reddy	Member	Advocate, Nellore	
21	Sri.N.Sudarshan Reddy	Member	Senior GM, Nelcast, Gudur	
22	Mr. K. Srinivasa rao	Member	Executive Engineer, Nodal, S.I division Nellore Andhra Pradesh	
23	Dr.Madhava Rao Kodali	Member Secretary	Professor, EEE, ASCET, Gudur	