



OSMANIA UNIVERSITY
HYDERABAD – 500 007

No. S/S/M/Acad. II/2017

Dated: 1) -04-2017

The Dean

Faculty of -----

Osmania University
Hyderabad.

Sub: Osmania University - Choice Based Credit System (CBCS) - Report of the committee to frame Rules, Regulations and Guidelines - 2016 - 2017 for undergraduate courses - Communication - Reg.

Sir / Madam,

With reference to the subject cited, I am to inform you that the Standing Committee of the Academic Senate at its meeting held on 23-03-2017 has resolved to approve the recommendations of the committee to frame **Rules & Regulations and guidelines** on adoption of CBCS at undergraduate level Osmania University with effect from the academic year 2016-2017 (copy enclosed).

This is for your information and necessary action.


Yours Sincerely,


DEPUTY REGISTRAR
(Academic)

Copy to

1. The Principal, -----
2. The Head, Dept. of -----, OU.
3. The Chairperson, BoS. in -----, OU.
4. The Controller of Examinations, OU.
5. The Addl. Controller of Examinations (UG/PG/Prof/Conf.), O.U.
6. The Supt. Unit-II to note the action taken on item No.8

The Director (I.S.) with a request to place the same in Univ. website


17/03/2021
PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P



Dean, Faculty of Informatics
University College of Engineering(A), Osmania University, Hyderabad-007

Prof Syeda Sameen Fatima
Dean, Faculty of Informatics

Tel.no. 040-27097577
Fax: 040-27095179
Grams :UNICOLENG

Order no. /DeanIT/2016

Date: 04-02-2016

Order

Osmania University (OU) has planned to introduce Choice Based Credit System (CBCS) from the academic year 2016-2017 for all its undergraduate and postgraduate programs as per the direction of the UGC. The following Working Groups have been formed for defining the Scheme, Syllabus, Rules and Regulations as per the UGC guidelines for implementing CBCS:

1. **Working Group for MCA**
 - a. Dr K Shyamala, OUCE, Chairperson
 - b. Dr VB Narsimha, OUCE, Member
 - c. Mrs B Sujatha, OUCE, Member
2. **Working Group for MSc(IS)**
 - a. Dr K Shyamala, OUCE, Chairperson
 - b. Dr VB Narsimha, OUCE, Member
 - c. Mrs B Sujatha, OUCE, Member
 - d. Head, Dept of CSE/IT, Nizam College, Member
3. **Working Group for BCA**
 - a. Dr K Shyamala, OUCE, Chairperson
 - b. Dr VB Narsimha, OUCE, Member
 - c. Mrs B Sujatha, OUCE, Member
 - d. Head, Dept of CSE/IT, Nizam College, Member
 - e. Head, Dept of CSE/IT, Saifabad PG College, Member
 - f. Head, Dept of CSE/IT, Secunderabad PG College, Member
4. **Working Group for BSc**
 - a. Dr K Shyamala, OUCE, Chairperson
 - b. Dr VB Narsimha, OUCE, Member
 - c. Mrs B Sujatha, OUCE, Member
 - d. Head, Dept of CSE/IT, Nizam College, Member
 - e. Head, Dept of CSE/IT, Saifabad PG College, Member
 - f. Head, Dept of CSE/IT, Secunderabad PG College, Member
 - g. Head, Dept of CSE/IT, Kothi Women's College, Member


10/3/2016

PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P



Chairperson, Board of Studies, IT
University College of Engineering(A), Osmania University, Hyderabad-007

Prof P Premchand
Chairperson, Board of Studies, IT

Tel.no. 040-27097577
Fax. 040-27095170
Grants :UNICOLING

5. **Working Group for BE(IT)**
- Dr K Shyamala, OUCE, Chairperson
 - Dr VB Narsimha, OUCE, Member
 - Mrs B Sujatha, OUCE, Member
 - Head, Dept of CSE, Vasavi College of Engineering, Member
 - Head, Dept of IT, CBIT, Member
 - Head, Dept of IT, MVSR, Member
 - Dr Moiz Khaiser, MJCET, Member

Chairperson, Board of Studies, IT
CHAIRMAN
Board of Studies (IT)
Dept. of Computer Science & Engg
University College of Engineering
Osmania University, Hyd-500007

PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P



University College of Engineering

(AUTONOMOUS)

OSMANIA UNIVERSITY, HYDERABAD - 500 007.

Minutes of the Meeting of the Committee constituted for consideration of the introduction of CBCS (Choice Based Credit System) in P.G. Programmes of Engineering held on 8th May 2015 at 12.00 Noon.

Members Present

- | | |
|---|------------------|
| 1. Prof. Ravande Kishore, Director, CDAAC | - Chairperson |
| 2. Prof. A. Venugopal Reddy, Dean, Faculty of Engg. | Special invitee. |
| 3. Prof. PVN Prasad, Dept. of Electrical Engg. | Member |
| 4. Prof. Sriram Venkatesh, Dept. of Mech. Engg. | Member/Convener |
| 5. Dr. P. Rajasekhar, Dept. of Civil Engg. | Member |


Member on Leave of Absence

1. Prof. Sameen Fatima, Dept. of CSE

The Chairperson extended welcome to the members and special invitee and initiated the proceedings of the meetings.

Prof. Ravande Kishore and Prof. A. Venugopal Reddy briefed the members about Choice Based Credit System (CBCS) to be introduced at P.G. level as per the directions of UGC. Prof. A. Venugopal Reddy also briefed about the initiatives taken by the University authorities about CBCS. The committee discussed all the issues pertaining CBCS and the existing system of P.G. Programmes in Engineering at University College of Engineering. Accordingly, the committee arrived at certain recommendations as listed below:

1. To continue with present pattern of 6 core subjects + 6 elective subjects + Seminars and Laboratories.


PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P

To include 3 to 4 cross discipline / Cross specialization courses as electives in each of the P.G. Programme. This should necessarily include Engineering Research Methodology subject. A Joint meeting of Board of Studies of various Departments is to be convened to finalize Cross discipline /Cross specialization courses as electives.

3. To introduce the credit system in P.G Programmes of engineering as per the details given below.

Subject particulars	Instructions/Contact hours	No. of credits
Core/elective subject	Three clock hours duration per week	03
Seminar	Two and half hour duration per week	02
Laboratory	Two and half hour duration per week	02
Project Seminar	Four clock hours per week*	08
Disseration	Six clock hours per week*	12

(* Minimum contact for students to interact with the faculty)

4. To give more weightage for continuous internal assessment (CIA) of students.

Accordingly the marks for CIA are to be revised upwards to 30(Thirty) and Semester examination (ESE) marks are to be revised to 70 (Seventy).

5. Existing minimum marks of 50(Combined CIA+ESE) remain the pass marks in any course.

6. As regards to Seminars and Laboratories, they would continue to remain as Departmental requirements with the same criteria of 50% as pass marks.

7. To introduce grace marks of two for candidates who are failing by only two marks margin in any theory subject.

8. To award letter grading for each course of P.G. Programmes on the same scale as is done for courses of B.E Programmes.

9. For Calculation of SGPA and CGPA, it is recommended to adopt the same guidelines followed for B.E Programms.

10. To reintroduce re-registration of subject as was practiced earlier.

The committee decided to meet again to discuss and evolve the evaluation procedure for Project seminar and Dissertation.

Chairperson


PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No 2
HYDERABAD - 500 034



OSMANIA UNIVERSITY
HYDERABAD - 500 007

No. ⁵⁷⁸ /I/Acad.I/2016

Date: 6 -06-2016

To

All the Members of Faculty of Engineering,
Osmania University,
HYDERABAD.

Sub: Convening the Meeting of Faculty of Engineering on 18-6-2016 –
Notice – Issued - Reg.

...

Sir/Madam,

A meeting of the Faculty of Engineering, Osmania University, is convened on **Saturday the 18th June, 2016 at 10.30 A.M.** in the Committee Room, Department of Civil Engineering, University College of Engineering, (Main Building-1st Floor), Osmania University, Hyderabad to discuss the following agenda

1. To consider and approve B.E.I year syllabus and scheme of instructions under CBCS system from the year 2016-2017.
2. To consider and approve B.E. III year syllabus and scheme of instructions from the year 2016-2017

You are, therefore, requested kindly to make it convenient to attend the meeting on **18-6-2016 at 10.30 A.M.** A copy of the agenda will be sent in due course.

The External members are requested to produce the travelling tickets for claiming the travelling allowance while submitting the bills.

Yours faithfully,

M. E. S.
m. s.

[Signature]
ASSISTANT REGISTRAR
(Academic)

[Signature]
12/03/2022
PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P

To

1. The Dean, Faculty of Engineering OU.
2. The Dean, Faculty of Technology, O.U
3. The Dean, Faculty of Science, O.U.
4. The Dean, Faculty of Informatics, O.U.
5. The Chairman, Board of Studies in Electronics & Communication Engg., O.U.
6. The Chairman, Board of Studies in Computer Science & Engg., O.U.
7. The Chairman, Board of Studies in Electrical Engg., O.U.
8. The Chairman, Board of Studies in Civil Engineering, O.U.
9. The Chairman, Board of Studies in Mechanical Engineering, O.U.
10. The Chairman, Board of Studies in Biomedical Engineering, O.U.
11. The Principal, University College of Engineering, O.U.
12. Prof. Ramachandram, Dept. of Comp.Science & Engineering, O.U.
13. Prof. P.V.N. Prasad, Dept. of Electrical Engineering, O.U.
14. Prof. Venkateswara Rao, Dept. of Bio-Medical Engineering, O.U.
15. Prof. S. Venkatesh, Dept. of Mechanical Engineering, O.U.
16. Dr. P. Chandrasekhar, Dept. of ECE, O.U.
17. The Principal, Chaitanya Bharathi Institute of Technology, Gandipet, Hyderabad
18. The Principal, MVSR, Engineering College, Nadargul, R.R. Dist.
19. The Principal, Muffakhamjah College of Engg.&Tech. Banjarahills,, Hyderabad.
20. The Principal, Vasavi College of Engineering, Ibrahimbagh, Hyderabad.
21. The Principal, Deccan College of Engg. &Tech. Darus-salam, Nampally, , Hyderabad.
22. The Principal, Methodist College of Engineering, Abids, Hyderabad.
23. The Principal, College of Engineering, JNTU, Kukatpally, Hyderabad – 500 085.
24. The Dean, Academic, NIT, Warangal.
25. The Executive Director (R & D), ECIL., Hyderabad – 500 062.
26. Dr. V.N. Sastry, Assistant Professor, Institute of Development & Research in Banking & Technology (IDRBT), Road No. 1, Castle Hills, Masab Tank, Hyderabad, 57
27. The Director, Institute of Chemical Technology (IICT) Uppal Road Hyd.7
28. The Principal Director, CITD, Balanagar, Hyd.37
29. The Executive Director, BHEL (R&D) Vikasnagar, Hyderabad.93

Copy to: -

1. The Dean, Faculty of Engineering, O.U.
2. The Asst. Registrar (Accounts – Pay Bills), O.U. (with a request to make arrangements for the Payment of TA / DA for the External Members)

Muffakham Jah
17/10/2022

PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P

09/JUNE/2016/ECE/3

E-mail sekharpaidimarry@gmail.com

Fax: 040-27095179



DEPT. OF ELECTRONICS & COMMUNICATION ENGINEERING
UNIVERSITY COLLEGE OF ENGINEERING (AUTONOMOUS)
OSMANIA UNIVERSITY: HYDERABAD – 500 007

Subject : Minutes of Meeting of Board of Studies in ECE, Osmania University, Hyderabad.
Ref No : 442/ECE/OU/BoS/2016 dated 6th June, 2016
Date, Time & Venue : 9th June, 2016 at 2:30 pm at UCE ECE Dept., OU.

The following were present:


1. Dr. P. Chandra Sekhar, Chairman, BOS in ECE and Convener
2. Dr. B. Rajendra Naik, Head, ECE, OU
3. Dr. R. Hema Latha, Dept. of ECE, UCE, OU
4. Dr. P. Laxmi Narayana, Professor/Principal Scientist, NERTU, OU
5. Dr. Kaleem Fatima, Dept of ECE, MJCET
6. Dr. MA Nayeem, Dept of ECE, DCET
7. Dr. DR Jahagirdar, Scientist, RCI, Hyderabad
8. Dr. Nukala Srinivasa Rao, Dept of ECE, Matrusri College of Engineering
9. Mr. I. Srikanth, Dept of ECE, Methodist
10. Mr. A. Gopala Sharma, Dept of ECE, SCETW
11. Mr. Nuli Namasivaya, Dept of ECE, MVSRC
12. Mrs. B. Sarala, Dept of ECE, MVSRC
13. Mrs. Y. Latha, Dept of ECE, SCETW
14. Mr. Md. Misbahuddin, Dept of ECE, UCE, OU

1.1 Welcome

The meeting started with the Chairman and Convener welcoming the members. He introduced all the members attended. He briefed the members that a series of meeting of the Head of the Departments of OU and its Affiliated Colleges from 18th March, 2016 onwards was organized to discuss and propose the scheme of instruction of III/IV and IV/IV BE(ECE). After thorough discussions scheme of III/IV and IV/IV BE (ECE) has been proposed and sub committees were constituted to propose the syllabus of III/IV BE (ECE).

1.2 Scheme & Syllabi of B.E (ECE) III/IV

Chairman proposed the Scheme and Syllabi of III/IV and IV/IV BE (ECE) and the members approved the same. Syllabus of III/IV BE (ECE) is discussed in detail and members suggested some modifications. The same were incorporated in the contents as given in Appendix-I.


17/03/2022
PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 007

09/JUNE/2016/BCE

I semester:

- i. Pulse circuits are included in Digital IC applications.
- ii. Computer Organization and Architecture is moved from III year II semester to III year I semester in place of Microprocessor and Microcontroller.
- iii. Digital System Design with VERILOG HDL and VERILOG HDL lab are introduced.

II Semester

- i. Analog and Digital Communication labs are merged.
- ii. Electronic Instrumentation is moved to IV year.

1.3 Scheme of B.E (ECE) IV/IV

The Scheme of BE IV/IV year is discussed and is approved as given in Appendix-II.

I Semester

- i. Two electives are introduced instead of one in existing scheme.
- ii. Computer Networks is shifted to IV II semester.
- iii. Mobile and Cellular Communication is made elective in IV II semester.

II Semester

- i. Radar and Satellite Communication is made elective.
- ii. In addition, two electives are offered.

1.4 Scheme of Instructions and Examinations for BE I and II semester (CBCS Pattern)

As per OU norms, we are to adopt Choice Based Credit System (CBCS) from the academic year 2016-17 onwards. In view of this, the existing rules of autonomous college will be adopted. It is proposed:

- A. To adopt semester-wise nomenclature to describe the academic years of UG program as described below:

OLD	NEW
I year I semester	I semester
I year II semester	II semester
II year I semester	III semester
II year II semester	IV semester
III year I semester	V semester
III year II semester	VI semester
IV year I semester	VII semester
IV year II semester	VIII semester


17/03/2016

PRINCIPAL

Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500-034. A.P



CHAIRMAN
BOARD OF STUDIES
Dept of Electronics & Comm. Engg
Osmania University
Hyderabad-500 087.

PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034, A.P

09/JUNE/2016/ECE

- B. Each theory course offers three credits and lab course offers one credit.
- C. The Scheme of Instruction is split into: Continuous Internal Evaluation (CIE) and Semester End Examination (SEE). For theory subject, CIE carries 30 marks and SEE carries 70 marks. For lab course CIE carries 25 marks and SEE carries 50 marks.
- D. The grades will be allotted based on the marks secured in university exam and sessionals as per the following criteria.

Academic Performance	Letter Grade	Grade Points
90% and above	S	10
80 % and above	A	09
70 % and above	B	08
60 % and above	C	07
50 % and above	D	06
40 % and above	E	05
Below 40 %	F	0

- E. Out of 30 sessional marks for theory, 10 marks are allotted for Assignments/Tutorials/Quizzes etc, in the course. The rest of the marks are to be based on the Internal test, weightage for each test is 10 marks.
- F. Two internal tests will be conducted in each semester. Each will carry 20 marks, out of which 6 marks for Part-A consisting of Objective and short answer questions and 14 marks for Part-B consisting of subjective questions. Average of tow tests plus marks obtained in assignments/tutorials/quizzes etc will be taken as sessional marks.
- G. Out of 25 or 50 sessional marks for practical, 10 or 20 allotted for viva-voce exam/test and 15 or 30 marks are allotted for laboratory record and observation.
- H. The question paper will be in two parts: Part – A is compulsory and covers the entire syllabus and carries 20 marks. Part-B carries 50 marks and covers all the units of the syllabus.
- I. Out of 50 marks for Project Work-1, 25 marks to-be awarded by the guide/supervisor and remaining 25 marks to be awarded by a subject expert committee constituted by the concerned HOD.
- J. The evaluation of BE project for maximum of 100 marks will be done as follows:
- 40 marks are allotted for quality of the project work covering a) literature review b) innovation/originality c) methodology and d) relevance/practical application.
 - 30 marks are allotted to Report writing/Documentation.
 - 30 marks are allotted to a) quality and clarity of presentation of project work and b) based on the performance in terms of his/her viva-voce examination and overall subject knowledge.

PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034, A.P

Page # 3

FACULTY OF ENGINEERING

RULES AND REGULATIONS

for four year

BACHELOR OF ENGINEERING

Degree Programme

of

OSMANIA UNIVERSITY


(With effect from the academic year 2016-17)

(As approved in Faculty Meeting held on 18 June 2016)



Issued by


**Dean, Faculty of Engineering
Osmania University, Hyderabad
Telangana State**


PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P

BACHELOR OF ENGINEERING
(A Four Year Degree Programme)
OSMANIA UNIVERSITY, HYDERABAD (T.S.)
RULES AND REGULATIONS
(With effect from the Academic year 2016-17)

CONTENTS

	Page No.
1. ADMISSION	5
2. DURATION AND PROGRAMMES OF STUDY	5
3. ATTENDANCE	6
4. SCHEME OF INSTRUCTION AND EXAMINATION	8
5. RULES OF PROMOTION	12
6. GRADING SYSTEM	13
7. AWARD OF DEGREE	14
8. IMPROVEMENT OF OVERALL SCORE	14
9. GENERAL RULES OF EXAMINATIONS	15
10. TRANSITORY REGULATIONS	16


PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P

BACHELOR OF ENGINEERING
(A Four Year Degree Programme)
OSMANIA UNIVERSITY, HYDERABAD (T.S.)

* * *

RULES AND REGULATIONS
(With effect from the Academic year 2016-17)

Note: 1. All the Rules and Regulations, hereinafter specified shall be read as a whole for the purpose of interpretation

1 ADMISSION

- 1.1 A candidate for admission to the Four Year Degree Program in Engineering must have passed the Intermediate Examination of the Board of Intermediate Education, Government of Telangana with Mathematics, Physics and Chemistry as optional courses, or any other examination recognised by the Osmania University as equivalent thereto.
- 1.2 All the eligible applicants shall have to qualify at the common Entrance Examination. The candidates will be admitted strictly in accordance with the merit secured at the Entrance Examination (EAMCET) conducted by the state government of Telangana, keeping in view the Rules in force regarding the reservations of seats to various categories of candidates. The other rules regarding admission to various B.E programmes for affiliated private engineering colleges as in force from time to time are also applicable.

2 DURATION AND PROGRAM OF STUDY

- 2.1 The duration of the program is eight semesters (four years) I, II, III, IV, V, VI, VII and VIII semesters. Each academic year shall comprise of two semesters.

Instruction --16 weeks

Preparation holidays (includes practical exams) -- 2 to 3 weeks

No admission / readmission / promotion is to be made after four weeks of the commencement of instruction.

In case there are any court cases consequent to which the


INCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034, A.P

authorities are compelled to admit any candidate after the announced last date of admissions, the admission (seat) of such a student would be reserved for the subsequent year on a supernumerary basis.

No refund of Tuition fee will be made after the commencement of Instruction.

2.2 The following Bachelor of Engineering (B.E.) programs of study are offered in the various affiliated colleges under the Faculty of Engineering, O.U.

- i) Civil Engineering
- ii) Computer Science and Engineering
- iii) Electrical and Electronics Engineering
- iv) Electronics and Communication Engineering
- v) Mechanical Engineering
- vi) Production Engineering
- vii) Electrical and Instrumentation Engineering
- viii) Automobile Engineering

The schedule of study of all programs is regulated by the Faculty of Engineering, Osmania University


(Note: The details of college wise B.E. Programmes offered every academic year can be obtained from respective colleges.)

2.3 Candidate who fails to fulfill all the requirements for the award of the degree as specified hereinafter within eight academic years from the time of admission, will forfeit his/her seat in the program and his/her admission will stand cancelled automatically.


3 ATTENDANCE

3.1 Candidates admitted to a particular programme of study are required to pursue a "Regular programme of study" before they are permitted to appear for the University Examination.

3.2 "A regular programme of study" means putting in attendance of not less than 75%.


12/03/2024
PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P

- 3.3 a) In special cases and for sufficient cause shown, the Vice-Chancellor may, on the specific recommendation of the Principal/Head of the Department, condone the deficiency in attendance to the extent of 10% on medical grounds subject to submission of medical certificate and payment of condonation fee.
- b) However, in respect of women candidates who seek condonation of attendance due to pregnancy, the Vice-Chancellor may condone the deficiency in attendance to the extent of 15% (as against 10% Condonation for others) on medical grounds subject to submission of medical certificate to this effect. Such condonation Permitted only once during the programme of study.
- 3.4 The fee for condonation of attendance on medical grounds shall be **Rs.1000/-payable** through Demand Draft drawn in favour of The Dean, Faculty of Engineering, Osmania University, Hyderabad and payable at Hyderabad.
- 3.5 Attendance of N.C.C/N.S.S Camps or Inter collegiate or Inter University or Inter State or International matches or debates or Educational Excursions or such other Inter University activities as approved by the authorities involving journeys outside the city in which the college is situated will not be counted as absence. However, such absence shall not exceed four weeks in the total period of Instructions. Such leave should not be availed twice during the program of study.
- 3.6 The attendance shall be calculated on the aggregate attendance of all the courses offered during the semester and reckoned from the date of commencement of classes / date of readmission in case of detained candidates as per the almanac communicated by The Dean, Faculty of Engineering, Osmania University.


12/03/2022
PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P

- 3.7 In case of the candidates who fail to put in the required attendance in a program of study, he/she shall be detained in the same class and will not be permitted to appear for the University examination. Such candidates shall have to seek readmission into the same class during the subsequent year in order to appear for the examination after fulfilling the attendance requirements, and on payment of requisite tuition fee.
- 3.8 a) Candidates admitted to the first year through an entrance test and do not have the requisite attendance but have not less than 40% attendance can seek readmission without once again appearing for the entrance test.
- b) In respect of candidates of such programs where the admissions are governed through an entrance test, candidates of 1 year 1 semester who do not have the minimum 40% attendance would lose their seat and they will have to seek admission afresh by appearing at the entrance test once again.

4 SCHEME OF INSTRUCTION AND EXAMINATION

- 4.1 Instruction in the various courses in each semester of all the four years, shall be provided by The Dean Faculty of Engineering, O.U. as per the Schemes of Instruction and syllabi prescribed.
- 4.2 The distribution of marks for **Continuous Internal Evaluation (CIE)** and the **Semester End Examination (SEE)** shall be as follows:

Course	Continuous Internal Evaluation (CIE)	Semester End Examination (SEE)
Each theory Course	30**	70****
Each practical or drawing Course for which 2 periods/week are provided in the Scheme of Instruction	25***	50
Each practical or drawing course for which 4 Periods /week are provided in the scheme of instruction	50***	50
Project	50#	100##

PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 024

Note: Semester End Examination (SEE) means University Examination.

4.3 Based on combined marks (i.e. CIE + SEE) obtained by the candidate, Letter Grades are awarded as shown in the Table below. Corresponding Grade Points are also shown in the Table.

Academic Performance	Letter Grade	Grade Points
90 % and above	S	10
80 % and above but less than 90%	A	09
70 % and above but less than 80%	B	08
60 % and above but less than 70%	C	07
50 % and above but less than 60%	D	06
40 % and above but less than 50%	E	05
Below 40 %	F	0

4.4 **Out of 30 sessional marks for Theory Course, 10 marks are allotted for Assignments /Quizzes etc. At least two Assignments and one Quiz are to be conducted. The rest of the 20 marks are allotted for Internal Tests to be awarded as stated below.

Two internal tests will be conducted in each semester. Each test will carry 20 marks, out of which 6 marks are for Part-A consisting of objective and short answer questions and 14 marks are for Part-B consisting of subjective questions. Average of two tests plus marks obtained in assignments/quizzes etc. will constitute the marks obtained by individual candidate under CIE.

4.5 ***Out of 25 or 50 CIE marks for Practical / Drawing course, 10 or 20 are allotted for viva-voce examination and 15 or 30 marks are awarded for class performance, record and observations.

4.6 ****The question paper for SEE will be in two parts, viz., Part-A and Part-B. Part-A (20 marks) is compulsory and it consist of 8 to 10 questions (short answer) covering the entire syllabus. Part-B (50 marks) consist of five questions (long answer) covering all the units of syllabus.

4.7 # Out of 50 marks under CIE, 25 marks are awarded by the Guide/Supervisor and remaining 25 are awarded by the subject expert committee constituted by the concerned Head of the Department


PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P

4.8 ^{##} The evaluation of BE project for maximum of 100 marks will be done as per guidelines given below:

- (i) **40 Marks** are allocated for quality of the project work covering
(a) Literature review, (b) Innovation / Originality,
(c) Methodology and (d) Relevance / Practical application.
- (ii) **30 Marks** are allocated to Report writing /Documentation.
- (iii) **30 Marks** are allocated for candidates performance in terms of his/her viva-voce examination and overall subject knowledge.

Note: A course which is evaluated based on CIE with no University Examination as per the scheme is treated as Pass when the candidate obtains 50% in CIE.

4.9 The details of instruction period, examination schedule, vacation etc. shall be notified by The Dean, Faculty of Engineering, O.U.

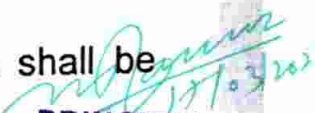
4.10 The medium of instruction and examination shall be English.

4.11 At the end of each semester, Semester End Examination shall be conducted as prescribed in the respective Schemes of Examination. The examinations pertaining to the semester conducted immediately after the semester is termed as Main Examinations and the examinations pertaining to the other semesters conducted there after will be called as Supplementary Examinations.

4.12 To enable the B.E. Final Year students to complete the program requirements in time, there shall be a Make-up Exam, for VIII semester only, which will be scheduled within one month after publication of results of VIII semester Main Examinations.

4.13. All the examination in Theory Course shall be conducted as written examination for a duration as prescribed in the Scheme of Examination. The examination in Laboratory Courses shall be conducted as written + oral together with carrying out the experiments as required in the specific Laboratory Course and for the specified duration. Laboratory record of experiments conducted during semester is also required to be produced at the semester end examination. For project work (mini or major), the related document (Report) is to be produced at the time of oral examination.

4.14. All the general rules for examinations (given under 9) shall be adhered to


PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P

4.15. A candidate shall be deemed to have fully passed a course (Theory/Practical), if he/she secures not less than the minimum marks/grade as prescribed. Minimum pass marks / grade in the University Examinations (SEE) plus CIE shall be.


(i) Each Theory Subject 40% - E Grade

(ii) Each Practical Course and Project work 50% - D Grade

(iii) Drawing Course treated as practical/ Lab.Course 50% - D Grade

Important Note: The candidate has to appear at the Semester End Examination (SEE) in all the Practical/Laboratory / Drawing Courses compulsorily irrespective of marks secured under CIE.

4.16. If a candidate in any semester examination of the program fails to secure the minimum marks/grade in any subject, then he/she shall have to appear only in the failed course of the semester.


12/03/2021
PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P

V RULES OF PROMOTION

Rules of promotion are as under:

Sl. No.	Semester/Class	Conditions to be fulfilled for Promotion	
1.	From I Semester to II Semester	Regular program of study of BE I Semester	
	From II Semester to III Semester	a) Regular program of study of BE II Semester b) Must have earned at least 50% of credits prescribed for BE I Semester and II Semester put together. The number of credits a candidate can have as backlogs are as under.	
For Example		No. of credits prescribed for I Sem and II Sem	No. of credits permitted as backlogs*
		43/44	22
		45/46	23
		47/48	24
2.	From III Semester to IV Semester	Regular program of study of BE III Semester	
3.	From IV Semester to V Semester	a) Regular program of study of BE IV Semester b) No. of backlog credits, if any of BE I,II,III and IV Semester put together shall not exceed 50% of the total number of credits prescribed for the BE III & IV Semester	
For Example		No. of credits prescribed for III & IV Semester	No. of credits permitted as backlogs
		43/44	22
		45/46	23
		47/48	24
4.	From V Semester to VI Semester	Regular program of study of BE V Semester	
5.	From VI Semester to VII Semester	a) Regular program of study of BE VI Semester b) No. of backlogs, if any of BE I to VI Semester put together shall not exceed to 50% of the total number of credits prescribed for the BE V & VI Semester	
For Example		No. of credits prescribed for V and VI Semester	No. of credits permitted as backlogs
		43/44	22
		45/46	23
		47/48	24
6.	From VII Semester to VIII Semester	Regular program of study of BE VII Semester	

[Signature]
21/05/2022

PRINCIPAL

Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034, A.P

- *Notes:** 1. If a candidate has more than permitted number of credits as backlogs, he/she will be detained. The candidate who wishes to take readmission into the year in which he/she is detained has to pay the total tuition fee of that year and all the credits earned during that year shall become null and void.
2. If the number of credits permitted as backlogs is not a whole number, the credits are rounded to next higher digit/whole number.

6 GRADING SYSTEM

- 6.1 Candidates who have passed all the examinations of the B.E. Degree Program shall be awarded Division in accordance with the grades secured by them in all eight Semesters taken together, including the CIE marks secured in those semesters.

The Grade secured by the candidate will be shown in the Memorandum of Marks as per his/her performance both in SEE and CIE together and as per the norms indicated in clause 4.3.

A minimum Cumulative Grade Point Average (CGPA) of 5 is required for the award of Degree. The consolidated memorandum of marks will reflect the Credits & Grade obtained by the candidates in all the course of B.E. Programme.

6.2 Semester Grade Point Average (SGPA) & Cumulative Grade Point Average (CGPA) Calculations:

$$(a) \text{ SGPA} = \frac{\sum (\text{Letter Grade Point} \times \text{Credits})}{\sum \text{Credits}}$$

SGPA is calculated upto second decimal point

SGPA is calculated only when all subjects in that semester are Cleared / Passed

$$(b) \text{ CGPA} = \frac{\sum [(\text{SGPA}) \times (\text{Total Credits})]}{\sum (\text{Total Credits})}$$


PRINCIPAL
 Muffakham Jah College Of
 Engineering & Technology,
 Banjara Hills, Road No.3,
 HYDERABAD - 500 034. A.P

CGPA at a given point of Semester is calculated upto second decimal point

CGPA is calculated only when total credits earned are equal to total credits prescribed as per scheme up to a semester in which the candidate has last appeared for Semester End Examination.

7 AWARD OF DEGREE

The degree of Bachelor of Engineering will be conferred on candidate who has pursued a regular program of study of four academic years as hereinafter prescribed in the Scheme of Instruction and has passed all the examinations as prescribed in the Scheme of Examinations

7.1 Award of Division

CGPA 7.5 and above	First Class with Distinction
CGPA 6.5 and above but less than 7.5	First Class
CGPA 5.5 and above but less than 6.5	Second Class
CGPA 5.0 and above but less than 5.5	Pass Class

7.2 Award of Gold Medal

A student securing highest CGPA in **single attempt** is eligible for award of Gold Medal.

8 IMPROVEMENT OF OVERALL SCORE

8.1 A candidate who wishes to improve his/her Overall score may do so within one academic year immediately after having passed all the examinations of the B.E. degree program, by reappearing at not more than two semesters (all subjects pertaining to the semester taken together) examinations. For the award of the Overall score, he/she will have the benefit of the higher of the two aggregates of marks / grades secured in the corresponding semester(s).

8.2 In case of candidates who have secured CGPA less than 5 may appear for improvement in individual subjects, to become eligible for the award of Degree within one year from the date of completion of VIII semester.


PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P

9 GENERAL RULES OF EXAMINATIONS

- 9.1 Application for permission to appear at every examination shall be made on the prescribed form, accompanied by three passport size full face photographs (not profile) which along with the necessary certificates regarding attendance, practical work, etc., and the prescribed fee, should be sent to the Controller of Examination, (COE) O.U through the Principal of the College where the candidate is enrolled as a regular student.
- 9.2 When a candidate's application is found in order and he/she is eligible to appear at an Examination, the the COE, O.U. shall furnish him with a Hall-Ticket, enabling the candidate to appear in the Examination, and this Hall-Ticket shall have to be produced by the Candidate before he/she is admitted to the premises where the Examination is conducted.
- 9.3 A Candidate who does not present himself/herself for the examination for any reason whatsoever, excepting shortage of attendance, shall not be entitled to claim refund of the whole or part of the examination fee, for subsequent Examination(s).
- 9.4 A candidate after he/she has been declared successful in the whole examination, shall be given a Provisional Certificate indicating the year of examination, the programme in which he/she was examined and, the overall Grade (CGPA) secured. However, the candidates have to obtain Degree Certificate (convocation) from the University Examination branch as per the notification issued by it.
- 9.5 No candidate shall be allowed to put in attendance for multiple programme and appear at examinations for the same simultaneously.
- 9.6 Students who have appeared once at any examination of the program need not put in fresh attendance, if they wish to reappear at the corresponding examination, notwithstanding the fact that the university may have introduced new courses. They will, however, have to appear at the examinations according to the scheme of examination and syllabi in force.


PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P

10. TRANSITORY REGULATIONS

Whenever a the or Scheme of Instruction is revised / modified in a particular semester/year, two more examinations immediately following thereafter shall be conducted according to the old syllabus /regulations. Candidates not appearing at the examinations or failing in them shall take the examination subsequently according to the revised syllabus and regulations.

* * * *

M. J. M. M.
01/03/2022

PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P

SCHEME OF INSTRUCTION & EXAMINATION**B.E. I - SEMESTER**

(Civil Engineering, Computer Science & Engineering,
Electronics & Communication Engineering, Electrical & Electronics Engineering,
and Electronics & Instrumentation Engineering)

S. No	Course Code	Course Title	Scheme of Instructions (Contact Hrs/Wk)			Scheme of Examination			Credits
			L	T	Pr/Drg	CIE	SEE	Duration in Hrs	
Theory Courses									
1.	BS 101 MT	Engineering Mathematics I	3	1	0	30	70	3	3
2.	BS 102 PH	Engineering Physics I	3	0	0	30	70	3	3
3.	BS 103 CH	Engineering Chemistry I	3	0	0	30	70	3	3
4.	ES 104 CE	Engineering Mechanics I	3	1	0	30	70	3	3
5.	ES 105 CS	Computer Programming and Problem Solving	3	0	0	30	70	3	3
6.	MC 106 EG	Engineering English	3	0	0	30	70	3	3
Practical / Laboratory Courses									
7.	BS 151 PH	Engineering Physics Lab I	0	0	2	25	50	3	1
8.	BS 152 CH	Engineering Chemistry Lab I	0	0	2	25	50	3	1
9.	ES 153 CE	Engineering Graphics I	0	0	2 x 2	50	50	3	2
10.	ES 154 CS	Computer Programming Lab	0	0	2	25	50	3	1
11.	ES 155 ME	Engineering Workshop I	0	0	2	25	50	3	1
12.	MC 156 EG	Engineering English Lab	0	0	2	25	50	3	1
Total			18	2	14	355	720		25

BS: Basic Sciences

ES: Engineering Sciences

MC: Mandatory Course

PC: Professional Course

HS: Humanities and Sciences

PE: Professional Elective

OE: Open Elective

CIE: Continuous Internal Evaluation

SEE: Semester End Examination(Univ.Exam)

L: Lectures T: Tutorials

Note: 1) Each contact hour is a Clock Hour

2) The practical class can be of two and half hour (clock hours) duration as per the requirement of a particular laboratory.

PRINCIPAL

Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P

SCHEME OF INSTRUCTION & EXAMINATION
B.E. II - SEMESTER
(ELECTRICAL & ELECTRONICS ENGINEERING)

S. No	Course Code	Course Title	Scheme of Instructions (Contact Hrs/Wk)			Scheme of Examination			Credits
			L	T	Pr/Drg	CIE	SEE	Duration in Hrs	
Theory Courses									
1.	BS 201 MT	Engineering Mathematics II	3	1	0	30	70	3	3
2.	BS 202 PH	Engineering Physics II	3	0	0	30	70	3	3
3.	BS 203 CH	Engineering Chemistry II	3	0	0	30	70	3	3
4.	HS 204 EG	Business Communication and Presentation Skills	3	0	0	30	70	3	3
5.	ES 965 ME	Elements of Mechanical Engineering	3	0	0	30	70	3	3
6.	ES 933 EC	Electronic Engineering-I	3	0	0	30	70	3	3
Practical / Laboratory Courses									
7.	BS 251 PH	Engineering Physics Lab II	0	0	2	25	50	3	1
8.	BS 252 CH	Engineering Chemistry Lab II	0	0	2	25	50	3	1
9.	ES 930 CS	Computer Skills Lab	0	0	2	25	50	3	1
10.	HS 253 EG	Communication Skills Lab	0	0	2	25	50	3	1
11.	ES 255 ME	Engineering Workshop-II	0	0	2	25	50	3	1
Total			18	1	10	305	670		23

BS: Basic Sciences

PC: Professional Course

OE: Open Elective

ES: Engineering Sciences

HS: Humanities and Sciences

CIE: Continuous Internal Evaluation

MC: Mandatory Course

PE: Professional Elective

SEE: Semester End Examination (Univ.Exam)

L: Lectures T: Tutorials

Note: 1) Each contact hour is a Clock Hour

2) The practical class can be of two and half hour (clock hours) duration as per the requirement of a particular laboratory.

[Signature]
 27/03/2021
PRINCIPAL
 Muffakham Jah College Of
 Engineering & Technology,
 Banjara Hills, Road No.3,
 HYDERABAD - 500 034. A.P

SCHEME OF INSTRUCTION & EXAMINATION
B.E. III - SEMESTER
(COMPUTER SCIENCE AND ENGINEERING)

S. No	Course Code	Course Title	Scheme of Instruction				Scheme of examination			Credits
			L	T	Pr/Drg	Contact Hrs /wk	CIE	SEE	Duration in Hrs	
Theory Courses										
1	BS 301 MT	Engineering Mathematics-III	3	1	-	4	30	70	3	3
2	ES 934 EC	Basic Electronics	3	-	-	3	30	70	3	3
3	PC 301 CS	Data Structures	3	1	-	4	30	70	3	3
4	PC 302 CS	Discrete Mathematics	3	1	-	4	30	70	3	3
5	PC 303 CS	Logic and Switching Theory	3	1	-	4	30	70	3	3
6	MC 916 CE	Environmental Sciences	3	-	-	3	30	70	3	3
Practical / Laboratory Courses										
7	ES 361 EE	Electrical Engineering Lab	-	-	2	2	25	50	3	1
8	ES 955 EC	Basic Electronics Lab	-	-	2	2	25	50	3	1
9	PC 351 CS	Data Structures Lab	-	-	2 x 2	4	25	50	3	2
Total			18	4	8	30	255	570		22

BS: Basic Sciences ES: Engineering Sciences MC: Mandatory Course
 PC: Professional Course HS: Humanities and Sciences
 L: Lectures T: Tutorials Pr : Practicals Drg: Drawing
 CIE: Continuous Internal Evaluation SEE: Semester End Examination (Univ.Exam)

Note: 1) Each contact hour is a Clock Hour

2) The practical class can be of two and half hour (clock hours) duration as per the requirement of a particular laboratory.

3) Students admitted into B.E./B.Tech. courses under lateral entry scheme (through ECET) from the academic year 2017-18 should undergo the following bridge course subjects at III Semester (CBCS).

- (1) ES 154 CS Computer Programming Lab
 (2) MC 156 EG Engineering English Lab


PRINCIPAL
 Muffakham Jah College Of
 Engineering & Technology,
 Banjara Hills, Road No.3,
 HYDERABAD - 500 034. A.P

SCHEME OF INSTRUCTION & EXAMINATION
B.E. IV - SEMESTER
(COMPUTER SCIENCE AND ENGINEERING)

S. No	Course Code	Course Title	Scheme of Instruction				Scheme of examination			Credits
			L	T	Pr/Drg	Contact Hrs / wk	CIE	SEE	Duration in Hrs	
Theory Courses										
1	BS 421 MT	Mathematics And Statistics	3	1	-	4	30	70	3	3
2	ES 422 EC	Signals And System Analysis	3	-	-	3	30	70	3	3
3	PC 401CS	Computer Organization	3	1	-	4	30	70	3	3
4	PC 402 CS	Object Oriented Programming Using Java	3	1	-	4	30	70	3	3
5	PC 403 CS	Programming Languages	3	1	-	4	30	70	3	3
6	PC 404 CS	Microprocessors And Interfacing	3	1	-	4	30	70	3	3
Practical / Laboratory Courses										
7	PC 451 CS	Java Programming Lab	-	-	2	2	25	50	3	1
8	PC 452 CS	Microprocessors	-	-	2	2	25	50	3	1
9	PC 454 CS	Mini Project	-	-	2x2	4	25	50	3	2
10	MC 453 HS	Society Outreach Program	-	-	2	2	50	--	3	2 units
Total			18	5	10	33	305	570		22

BS: Basic Sciences

ES: Engineering Sciences

MC: Mandatory Course

PC: Professional Course

HS: Humanities and Sciences

L: Lectures

T: Tutorials

Pr : Practicals

Drg: Drawing

CIE: Continuous Internal Evaluation

SEE: Semester End Examination (Univ. Exam)

Note: 1) Each contact hour is a Clock Hour

2) The practical class can be of two and half hour (clock hours) duration as per the requirement of a particular laboratory.


PRINCIPAL

Muffakham Jah College Of
 Engineering & Technology,
 Banjara Hills, Road No.3,
 HYDERABAD - 500 034. A.P

SCHEME OF INSTRUCTION & EXAMINATION
B.E. V – Semester
(ELECTRICAL AND ELECTRONICS ENGINEERING)

S. No.	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration in Hrs	
Theory Courses										
1.	PC501EE	Power Systems-II	3	-	-	3	30	70	3	3
2.	PC502EE	Electrical Machines-II	3	-	-	3	30	70	3	3
3.	PC503EE	Electrical Measurements and Instrumentation	3	1	-	4	30	70	3	3
4.	PC504EE	Linear Control Systems	3	1	-	4	30	70	3	3
5.	PC505EE	Digital Signal Processing and Applications	3	1	-	4	30	70	3	3
6.	PE-1	Professional Elective-I	3	-	-	3	30	70	3	3
7.	MC901EG	Gender Sensitization	3	-	-	3	30	70	3	0
Practical / Laboratory Courses										
8.	PC551EE	Electrical Machines Lab-1	-	-	2	2	25	50	3	1
9.	PC552EE	Power Electronics Lab	-	-	2	2	25	50	3	1
10.	PC553EE	Circuits & Measurements Lab	-	-	2	2	25	50	3	1
		Total	21	3	6	30	285	640		21

Professional Elective-1

PE501EE	Programmable Logic controllers
PE502EE	Electronic Instrumentation
PE503EE	FACTS Devices

MC: Mandatory Course

PC: Professional Course

L: Lecture **T:** Tutorial

P: Practical **D:** Drawing

CIE: Continuous Internal Evaluation

SEE: Semester End Examination (Univ. Exam)

Note: 1) Each contact hour is a Clock Hour

2) The practical class can be of two and half hour (clock hours) duration as per the requirement of a particular laboratory.

SCHEME OF INSTRUCTION & EXAMINATION
B.E. VI – Semester
(ELECTRICAL AND ELECTRONICS ENGINEERING)

S. No.	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration in Hrs	
Theory Courses										
1.	PC601EE	Electrical Machines-III	3	1	-	4	30	70	3	3
2.	PC602EE	Microprocessors and Microcontrollers	3	1	-	4	30	70	3	3
3.	PC603EE	Switchgear and Protection	3	-	-	3	30	70	3	3
4.	PC604EE	Renewable Energy Technologies	3	-	-	3	30	70	3	3
5.	PE-II	Professional Elective-II	3	-	-	3	30	70	3	3
6.	OE-I	Open Elective-I	3	-	-	3	30	70	3	3
Practical / Laboratory Courses										
7.	PC651EE	Electrical Machines lab-II	-	-	2	2	25	50	3	1
8.	PC652EE	Digital signal Processing Lab	-	-	2	2	25	50	3	1
9.	PC653EE	Control systems lab	-	-	2	2	25	50	3	1
10.	MC	Mandatory Course	-	-	3	3	50	-	3	0
11.	SI	Summer Internship*								
			18	2	9	29	305	570		21

Professional Elective-II

PE601EE	AI Techniques
PE602EE	Electric Distribution System
PE603EE	Digital Control systems

Mandatory Course

MC951SP	Yoga Practice
MC952SP	National Service Scheme
MC953SP	Sports

Note: * The students have to undergo a Summer Internship of 6 weeks duration after VI semester and credits will be awarded in VII semester after evaluation.

**Indicates that subject not offered to the students of Electrical & Electronics Engineering and Electronics & Instrumentation Engineering Department.

Open Elective-1

OE601CE	Disaster Management
OE602CE	Geospatial Techniques
OE601CS	Operating Systems
OE602CS	OOPS using JAVA
OE601EC	Embedded Systems
OE602EC	Digital System Design Using Verilog HDL
OE601EE	Reliability Engineering**
OE602EE	Basics of Power Electronics**
OE601ME	Industrial Robotics
OE602ME	Material Handling
OE601LA	Intellectual Property Rights

ES: Engineering Sciences

MC: Mandatory Course

PC: Professional Course

L: Lectures

T: Tutorials

P: Practical

D: Drawing

CIE: Continuous Internal Evaluation

SEE: Semester End Examination (Univ. Exam)

Note: 1) Each contact hour is a Clock Hour

[Signature]
17/03/2022

PRINCIPAL

Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P

SCHEME OF INSTRUCTION & EXAMINATION
B.E. VII - Semester
(CIVIL ENGINEERING)

S. No.	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration in Hrs	
Theory Courses										
1	PC 701 CE	Str. Engg. Design and Drawing – II (Steel)	3	1	-	4	30	70	3	3
2	PC 702 CE	Estimation Costing & Specifications	3	1	-	4	30	70	3	3
3	PC 703 CE	Finite Element Techniques	3	-	-	3	30	70	3	3
4	PC 704 CE	Prestressed Concrete	3	-	-	3	30	70	3	3
5	PC 705 CE	Foundation Engineering	3	-	-	3	30	70	3	3
6		Open Elective – II	3	-	-	3	30	70	3	3
7		Open Elective – III	3	-	-	3	30	70	3	3
Practical/ Laboratory Courses										
8	PC 751 CE	Computer Application Lab	-	-	2	2	25	50	3	1
9	PW 761 CE	Project Work – I	-	-	4	4	50	-	-	2
10	SI 762 CE	Summer Internship	-	-	-	-	50	-	-	2
			21	02	06	29	335	540		26

Open Elective – II			Open Elective – III		
S. No.	Course Code	Course Title	S. No.	Course Code	Course Title
1	OE 771 CE**	Green Building Technologies	1	OE 781 CE**	Road Safety Engineering
2	OE 772 CS	Data Science Using R Programming	2	OE 782 IT	Software Engineering
3	OE 773 EC	Fundamentals of IoT	3	OE 783 EC	Principles of Electronic Communications
4	OE 774 EE	Non-Conventional Energy Sources	4	OE 784 EE	Illumination and Electric Traction systems
5	OE 775 ME	Entrepreneurship	5	OE 785 ME	Mechatronics

PC: Professional Course

L: Lectures

CIE: Continuous Internal Evaluation

T: Tutorials

PE: Professional Elective

P: Practical

D: Drawing

SEE: Semester End Examination (Univ. Exam)

Note: 1) Each contact hour is a Clock Hour

2) The practical class can be of two and half hour (clock hours) duration as per the requirement of a particular laboratory.

Note-2: * The students have to undergo a Summer Internship of four weeks' duration after VI semester and credits will be awarded in VII semester after evaluation.

** Subject is not offered to the students of Civil Engineering Department.

M. J. M.
13/03/2022

PRINCIPAL

Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034 A P

SCHEME OF INSTRUCTION & EXAMINATION
B.E. VIII - SEMESTER
(CIVIL ENGINEERING)

S. No.	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration in Hrs	
Theory Courses										
1	PC 801 CE	Construction Management & Technology	3	-	-	3	30	70	3	3
2		Professional Elective – III	3	-	-	3	30	70	3	3
3		Professional Elective – IV	3	-	-	3	30	70	3	3
4		Professional Elective – V	3	-	-	3	30	70	3	3
5	MC 901 EG	Gender Sensitization	3	-	-	3	30	70	3	-
Practical/ Laboratory Courses										
6	PW 961 CE	Project Work – II	-	-	16	16	50	100	-	8
7		Mandatory Course	-	-	3	3	50	-	3	-
			15	-	19	34	250	450		20

Professional Elective – III			Professional Elective – IV		
S. No.	Course Code	Course Title	S. No.	Course Code	Course Title
1	PE 821 CE	Retrofitting and Rehabilitation of Structures	1	PE 831 CE	Structural Dynamics
2	PE 822 CE	Computer Aided Analysis and Design	2	PE 832 CE	Design with Geosynthetics
3	PE 823 CE	Applied Hydrology	3	PE 833 CE	Groundwater Management
4	PE 824 CE	Introduction to Climate Change	4	PE 834 CE	Intelligent Transportation Systems
Professional Elective – V			Mandatory Course		
1	PE 841 CE	Prefabrication Engineering	1	MC 951 SP	Yoga Practice
2	PE 842 CE	Principles of Green Building Practices	2	MC 952 SP	NSS
3	PE 843 CE	Advanced Reinforced Concrete Design	3	MC 953 SP	Sports
4	PE 844 CE	Traffic Engineering & Infrastructure Design			

PC: Professional Course

L: Lectures

T: Tutorials

CIE: Continuous Internal Evaluation

PE: Professional Elective

P: Practical

D: Drawing

SEE: Semester End Examination (Univ. Exam)

Note: 1) Each contact hour is a Clock Hour

2) The duration of the practical class is two clock hours, however it can be extended wherever necessary, to enable the student to complete the experiment



PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 024

FACULTY OF ENGINEERING
Scheme of Instruction & Examination
(AICTE Model Curriculum for the Academic Years 2020-2024)

and
Syllabi
B.E. I to VIII Semester
of
Four Year Degree Programme
in
Civil Engineering

(With effect from the academic year 2020– 2021)
(As approved in the faculty meeting held on 04.01.2021)



Issued by
Dean, Faculty of Engineering
Osmania University, Hyderabad – 500 007
30.01.2021

PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P

Undergraduate Degree Courses in Engineering

CIVIL ENGINEERING

General, Course Structure & Scheme & Semester-wise credit distribution

A. Definition of Credit:

1 Hour Lecture (L) per week	1 credit
1 Hour Tutorial (T) per week	1 credit
1 Hour Practical (P) per week	0.5 credits
2 Hours Practical (Lab) per week	1 credit

B. Range of credits-

A range of credits from 150 to 160 for a student to be eligible to get Undergraduate degree, Bachelor of Engineering. in Civil Engineering. A student will be eligible to get UG degree with Honors or additional Minor Engineering, if he/she completes an additional 20 credits, which can be acquired through MOOCs. The list of approved MOOCs courses will be provided by the Chairperson, BoS, before the commencement of each semester preferably after the completion of V semester.

C. Structure of B.E. Civil Engineering program:

S. No.	Category	Break up of Credits (Total 160)	As recommended by AICTE for CE
1	Humanities and Social Sciences including Management Courses	10	12
2	Basic Science Courses	23	26
3	Engineering Science courses including workshop, drawing, basics of electrical/mechanical/computers etc.	27	29
4	Professional core courses	59	47
5	Professional Elective courses relevant to chosen specialization/branch	21	23
6	Open subjects– Electives from other technical and /or emerging subjects	9	11
7	Project work, seminar and internship in industry or Appropriate workplace/ academic and research institutions in India/abroad	10	12
8	Mandatory Courses [Induction program *, Environmental Sciences, Indian Constitution, Essence of Indian Traditional Knowledge]	(non-credit)	
	Total	159	160

***Mandatory Requirement:** Three weeks' induction program to be conducted before commencement of the coursework of Semester – I as per the guidelines given by AICTE

D. Course Code as per Subject Area:

S.No.	Course code	Courses – Subject Area
1	HS	Humanities and Social Sciences
2	BS	Basic Sciences
3	ES	Engineering Sciences
4	PC	Professional core courses
5	PE	Professional Elective courses
6	OE	Open Elective courses
7	PW	Project Work, Seminar and/or Internships
8	MC	Mandatory courses (<i>Non-Credit</i>)

Notations: XYZ

X – Serial Number of the Course – Subject Area as per the above table

YZ – Course Numbers starting from '01' for theory courses.

– Course Numbers starting from '51' for laboratory courses.

SUBJECT AREA WISE LIST OF COURSES AND ASSOCIATED CREDITS**1. HUMANITIES & SOCIAL SCIENCES**

S.No	Code No.	Subject	Semester	Credits
1.	HS101EG	English	II	2
2.	HS151EG	English Laboratory	II	1
3.	HS103CM	Finance and Accounting	IV	3
4.	HS102EG	Effective Technical Communication in English	IV	2
5.	HS104BM	Professional Practice and Ethics	VI	2
			Total Credits:	10

2. BASIC SCIENCES

S. No	Code No.	Subject	Semester	Credits
1.	BS201MT	Mathematics-I	I	4
2.	BS203MT	Mathematics-II	II	4
3.	BS202PH	Engineering Physics	II	4
4.	BS251PH	Physics Laboratory	II	1.5
5.	BS214CH	Chemistry	I	4
6.	BS253CH	Chemistry Laboratory	I	1.5
7.	BS205MT	Mathematics-III	III	4
			Total Credits:	23

3. ENGINEERING SCIENCES

S. No	Code No.	Subject	Semester	Credits
1.	ES302CS	Programming and Problem Solving	I	3
2.	ES351CS	Programming and Problem Solving Laboratory	I	1
3.	ES352ME	Workshop Practice	I	3
4.	ES353CE	Engineering Graphics	II	3
5.	ES302CE	Engineering Mechanics	II	4
6.	ES354CE	Building Drawing and Drafting Laboratory	III	3
7.	ES301EE	Basic Electrical Engineering	III	3
8.	ES304CE	Engineering Geology	IV	3
9.	ES355CE	Engineering Geology Laboratory	IV	1
10.	ES310CE	Disaster Preparedness & Planning	VII	3
			Total Credits:	27

* Engineering Mechanics and Engineering Graphics and Design courses are also offered as service courses by the Department of Civil Engineering to the other departments.

4. PROFESSIONAL CORE COURSES

S.No	Code No.	Subject	Semester	Credits
1.	PC 401CE	Building Materials and Construction	III	3
2.	PC 402CE	Solid Mechanics	III	3
3.	PC 403CE	Fluid Mechanics	III	3
4.	PC 404CE	Surveying and Geomatics	III	3
5.	PC 451CE	Fluid Mechanics Laboratory	III	1
6.	PC 452CE	Surveying Laboratory	III	1
7.	PC 405CE	Mechanics of Materials	IV	3
8.	PC 406CE	Hydraulic Engineering	IV	3
9.	PC 407CE	Design of Reinforced Concrete Structures	IV	3
10.	PC 408CE	Hydrology	IV	3
11.	PC 453CE	Mechanics of Materials Laboratory	IV	1
12.	PC 454CE	Hydraulic Engineering Laboratory	IV	1
13.	PC 409CE	Theory of Structures	V	3
14.	PC 410CE	Soil Mechanics	V	3
15.	PC 411CE	Concrete Technology	V	3
16.	PC 412CE	Water Resources Engineering	V	3
17.	PC 413CE	Environmental Engineering	V	3
18.	PC 455CE	Soil Mechanics Laboratory	V	1
19.	PC 456CE	Concrete Technology Laboratory	V	1
20.	PC 457CE	Environmental Engineering Laboratory	V	1
21.	PC 414CE	Construction Engineering and Management	V	2
22.	PC 415CE	Design of Steel Structures	VI	3
23.	PC 416CE	Transportation Engineering	VI	3
24.	PC 458CE	Transportation Engineering Laboratory	VI	1
25.	PC 459CE	Computer Applications Laboratory	VI	1
26.	PC 417CE	Estimation and Specification	VII	2
27.	PC 460CE	Estimation and Specification Laboratory	VII	1
Total Credits:				59

5. PROFESSIONAL ELECTIVE COURSES

S.No	Code No.	Subject	Semester	Credits
1.	PE 5YZ CE	Elective I	VI	3
2.	PE 5YZ CE	Elective II	VI	3
3.	PE 5YZ CE	Elective III	VI	3
4.	PE 5YZ CE	Elective IV	VII	3
5.	PE 5YZ CE	Elective V	VII	3
6.	PE 5YZ CE	Elective VI	VII	3
7.	PE 5YZ CE	Elective VII	VIII	3
Total Credits:				21

* Professional Elective Courses are listed as per the categories at the end of this section

6. OPEN ELECTIVE COURSES

S.No	Code No.	Subject	Semester	Credits
1.	OE 6YZ	Open Elective-I	VI	3
2.	OE 6YZ	Open Elective-II	VII	3
3.	OE 6YZ	Open Elective-III	VIII	3
Total Credits:				9

* Open Elective Courses are listed as per the categories at the end of this section

7. PROJECT WORK, SEMINAR AND/OR INTERNSHIPS

S.No	Code No.	Subject	Semester	Credits
1	PW701CE	Survey Camp	V	1
2	PW702CE	Summer Internship Evaluation	VII	2
3.	PW703CE	Project Work - I	VII	3
4.	PW704CE	Project Work - II	VIII	4
Total Credits:				10

8. MANDATORY COURSES

S.No	Code No.	Subject	Semester	Credits
1	MC 802CE	Environmental Sciences	I	-
2	MC 803PY	Essence of Indian Traditional Knowledge	VII	-
3.	MC 801PO	Constitution of Indian	VIII	-
Total Credits:				-

PROFESSIONAL ELECTIVES
Categories & Courses

I. STRUCTURAL ENGINEERING

S.No	Course Title	Semester
1.	Structural Analysis	VI
2.	Earthquake Resistant Design of Structures	VI
3.	Advanced Concrete Technology	VI
4.	Prestressed Concrete	VII
5.	Structural Engineering Design and Detailing (RCC & Steel)	VII
6.	Finite Element Method	VII
7.	Advanced Reinforced Concrete Design	VIII

II. GEOTECHNICAL & TRANSPORTATION ENGINEERING

S.No	Course Title	Semester
1.	Geotechnical Design	VI
2.	Foundation Engineering	VI
3.	Traffic and Road Safety Engineering	VI
4.	Highway Construction and Management	VII
5.	Intelligent Transportation Systems	VII
6.	Urban Transportation Planning	VII
7.	Ground Improvement Techniques	VIII

III. WATER RESOURCES ENGINEERING & ENVIRONMENTAL ENGINEERING

S.No	Course Title	Semester
1.	Open Channel Flows	VI
2.	Ground Water Engineering	VI
3.	Design of Irrigation Structures	VI
4.	Environmental Impact Assessment of Civil Engineering Projects	VII
5.	Water and Air Quality Modelling	VII
6.	Surface Hydrology	VII
7.	Principles of Climate change	VIII

IV. CONSTRUCTION MANAGEMENT & GEOGRAPHICAL INFORMATION SYSTEMS

S.No	Course Title	Semester
1.	Construction Equipment and Automation	VI
2.	Sustainable Construction Methods	VI
3.	Infrastructure Engineering	VI
4.	Instrumentation & Sensor Technologies for Civil Engineering Applications	VII
5.	Principles of Green Buildings	VII
6.	GIS and Remote Sensing	VII
7.	Repair and Rehabilitation Techniques	VIII

M. J. Khan
17/03/2022

PRINCIPAL

Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P

POOL OF OPEN ELECTIVES OFFERED BY VARIOUS DEPARTMENTS

OE – 1 (VI Sem), OE – 2 (VII Sem) and OE – 3 (VIII Sem)

<p>CE:</p> <ol style="list-style-type: none"> 1. Disaster Management 2. Green Building Technologies 3. Road Safety Engineering 	<p>CSE:</p> <ol style="list-style-type: none"> 1. Database Management Systems 2. Introduction to Programming with Python 3. Software Engineering 4. Programming with R 5. Cloud Computing 6. Introduction to AI and Data Science 	<p>IT:</p> <ol style="list-style-type: none"> 1. Multimedia and Application Development 2. Web Programming 3. Operating Systems
<p>ECE:</p> <ol style="list-style-type: none"> 1. Principles of Electronic Communications 2. Embedded Systems 3. Fundamentals of Internet of Things 4. MATLAB Programing for Numerical Computation 	<p>EEE:</p> <ol style="list-style-type: none"> 1. Non-Conventional Energy Resources 2. Energy Audit and Energy Regulation 3. Artificial Neural Networks 	<p>EIE:</p> <ol style="list-style-type: none"> 1. Electronic Measurements and Instrumentation 2. Energy Storage Systems 3. Non-Conventional Power Generation 4. Control Systems
<p>ME:</p> <ol style="list-style-type: none"> 1. Operations Techniques 2. Supply Chain Management 3. Introduction to Robotics 4. Non destructive Testing Methods 	<p>PE:</p> <ol style="list-style-type: none"> 1. World Class Manufacturing 2. Introduction to Material Handling 3. Fabrication Processes 4. Total Quality Management 	<p>AE:</p> <ol style="list-style-type: none"> 1. Fundamentals of Automobile Engineering 2. Intellectual Property Rights 3. Product Engineering 4. Vehicle Maintenance

Note:

* Students should take any **ONE** Open Electives from List of Open Electives Offered by Other Departments/Branches only

Ex: - A Student of Civil Engineering can take Open Electives from all other departments/branches except Open Electives offered by Civil Engineering Dept

[Handwritten Signature]
17/03/2022

PRINCIPAL

Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P

SCHEME OF INSTRUCTION & EXAMINATION

SEMESTERS I TO VII

B.E. (Civil Engineering) I- SEMESTER

S. No.	Course Code	Course Title	Scheme of Instruction			Scheme of Examination		Credits
			L	T	Pr/Drg	CIE	SEE	
Theory Courses								
1	BS 201 MT	Mathematics -I	3	1	-	30	70	4
2	BS 214 CH	Chemistry	3	1	-	30	70	4
3	ES 302 CS	Programming and Problem Solving	3	-	-	30	70	3
4	MC 802CE	Environmental Sciences	2	-	-	30	70	-
Practical/ Laboratory Courses								
5	BS 253 CH	Chemistry Laboratory	-	-	3	25	50	1.5
6	ES 351 CS	Programming and Problem Solving Laboratory	-	-	2	25	50	1
7	ES 352 ME	Workshop Practice	-	-	2 x 3hrs	50	50	3
			11	2	12			16.5

*Mandatory Requirement: Three weeks induction program to be conducted before commencement of the coursework of Semester – I as per the guidelines given by AICTE

B.E. (Civil Engineering) II- SEMESTER

S. No.	Course Code	Course Title	Scheme of Instruction			Scheme of Examination		Credits
			L	T	Pr/Drg	CIE	SEE	
Theory Courses								
1	HS 101 EG	English	2	-	-	30	70	2
2	BS 203MT	Mathematics -II	3	1	-	30	70	4
3	BS 202 PH	Engineering Physics	3	1	-	30	70	4
4	ES 302 CE	Engineering Mechanics	3	1	-	30	70	4
Practical/ Laboratory Courses								
5	HS 151 EG	English Laboratory	-	-	2	25	50	1
6	BS 251 PH	Physics Laboratory	-	-	3	25	50	1.5
7	ES 353 CE	Engineering Graphics	-	-	2 x3hrs	50	50	3
			11	3	10			19.5

* Engineering Mechanics and Engineering Graphics and Design courses are also offered as service courses by the Department of Civil Engineering to the other departments.

B.E. (Civil Engineering) III– SEMESTER

S. No.	Course Code	Course Title	Scheme of Instruction			Scheme of Examination		Credits
			L	T	Pr/ Drg	CIE	SEE	
Theory Courses								
1	BS 205 MT	Mathematics – III	3	1	-	30	70	4
2	ES 301 EE	Basic Electrical Engineering	3	-	-	30	70	3
3	PC 401 CE	Building Materials and Construction	3	-	-	30	70	3
4	PC 402 CE	Solid Mechanics	3	-	-	30	70	3
5	PC 403 CE	Fluid Mechanics	3	-	-	30	70	3
6	PC 404 CE	Surveying and Geomatics	3	-	-	30	70	3
Practical/ Laboratory Courses								
8	PC 451CE	Fluid Mechanics Laboratory	-	-	2	25	50	1
9	PC 452CE	Surveying Laboratory	-	-	2	25	50	1
10	ES 354CE	Building Drawing & Drafting Laboratory	-	-	2 x 3hrs	25	50	3
			20	-	10			24

B.E. (Civil Engineering) IV– SEMESTER

S. No.	Course Code	Course Title	Scheme of Instruction			Scheme of Examination		Credits
			L	T	Pr/ Drg	CIE	SEE	
Theory Courses								
1	HS 103 CM	Finance and Accounting	3	-	-	30	70	3
2	HS102 EG	Effective Technical Communication in English	2	-	-	30	70	2
3	ES 304 CE	Engineering Geology	3	-	-	30	70	3
4	PC 405CE	Mechanics of Materials	3	-	-	30	70	3
5	PC 406CE	Hydraulic Engineering	3	-	-	30	70	3
6	PC 407 CE	Design of Reinforced Concrete Structures	3	-	-	30	70	3
7	PC408 CE	Hydrology	3	-	-	30	70	3
Practical/ Laboratory Courses								
8	ES 355 CE	Engineering Geology Laboratory	-	-	2	25	50	1
9	PC 453 CE	Mechanics of Materials Laboratory	-	-	2	25	50	1
10	PC 454 CE	Hydraulic Engineering Laboratory	-	-	2	25	50	1
		Survey Camp *						
			20	-	6			23

* To be conducted after the IV Semester in the Summer Vacation. To be evaluated in V Sem

B.E. (Civil Engineering) V – SEMESTER

S. No.	Course Code	Course Title	Scheme of Instruction			Scheme of Examination		Credits
			L	T	Pr/Dr g	CIE	SEE	
Theory Courses								
1	PC 409 CE	Theory of Structures	3	-	-	30	70	3
2	PC 410 CE	Soil Mechanics	3	-	-	30	70	3
3	PC 411 CE	Concrete Technology	3	-	-	30	70	3
4	PC 412 CE	Water Resources Engineering	3	-	-	30	70	3
5	PC 413 CE	Environmental Engineering	3	-	-	30	70	3
6	PC 414 CE	Construction Engineering & Management	3	-	-	30	70	2
Practical/ Laboratory Courses								
7	PC 455 CE	Soil Mechanics Laboratory	-	-	2	25	50	1
8	PC 456 CE	Concrete Technology Laboratory	-	-	2	25	50	1
9	PC 457 CE	Environmental Engineering Laboratory	-	-	2	25	50	1
10	PW701 CE	Survey Camp	-	-	-			1
			18	-	6			21

B.E. (Civil Engineering) VI – SEMESTER

S. No.	Course Code	Course Title	Scheme of Instruction			Scheme of Examination		Credits
			L	T	Pr/Dr g	CIE	SEE	
Theory Courses								
1	HS 104 BM	Professional Practice & Ethics	2	-	-	30	70	2
2	PC 415 CE	Design of Steel Structures	3	-	-	30	70	3
3	PC 416 CE	Transportation Engineering	3	-	-	30	70	3
4	PE-1	Professional Elective – I	3	-	-	30	70	3
5	PE-2	Professional Elective - II	3	-	-	30	70	3
6	PE-3	Professional Elective - III	3	-	-	30	70	3
7	OE-I	Open Elective – I	3	-	-	30	70	3
Practical/ Laboratory Courses								
8	PC 458 CE	Transportation Engineering Laboratory	-	-	2	25	50	1
9	PC 459 CE	Computer Applications Laboratory	-	-	2	25	50	1
		Summer Internship*						
			18	-	6			22

* To be conducted after the V Semester in the Summer Vacation and to be evaluated in VI Sem

Professional Elective – 1		
S. No.	Course Code	Course Title
1	PE 501 CE	Structural Analysis
2	PE 502 CE	Geotechnical Design
3	PE 503 CE	Open Channel Flows
4	PE 504 CE	Construction Equipment and Automation

Professional Elective – 2		
S. No.	Course Code	Course Title
1	PE 505 CE	Earthquake Resistant Design of Structures
2	PE 506 CE	Foundation Engineering
3	PE 507 CE	Ground Water Engineering
4	PE 508 CE	Sustainable Construction Methods

Professional Elective – 3		
S. No.	Course Code	Course Title
1	PE 509 CE	Advanced Concrete Technology
2	PE 510 CE	Traffic and Road Safety Engineering
3	PE 511 CE	Design of Irrigation Structures
4	PE 512 CE	Infrastructure Engineering

Open Elective 1		
Sl.No	Code	Name of Subject
1	OE601 EE	Electrical Energy Conservation and Safety (Not for EEE & EIE Students)
2	OE602 EE	Reliability Engineering (Not for EEE & EIE Students)
3	OE611 AE	Basics of Automobile Engineering (Not for Mech./Prod./Automobile Engg. students)
4	OE611 ME	Industrial Robotics (Not for Mech./Prod./Automobile Engg. students)
5	OE601 EG	Soft Skills & Interpersonal Skills
6	OE602 MB	Human Resource Development and Organizational Behaviour
7	OE601 LW	Cyber Law and Ethics
8	OE601 CS	Operating Systems (Not for CSE Students)
9	OE602 CS	OOP using Java (Not for CSE Students)
10	OE601 IT	Database Systems (Not for IT Students)
11	OE602 IT	Data Structures (Not for IT Students)
12	OE601 CE	Disaster Mitigation (Not for Civil Engg. Students)

* Offered by Civil Engineering Department. CE Students are not eligible to take this course

B.E. (Civil Engineering) VII- SEMESTER

S. No.	Course Code	Course Title	Scheme of Instruction			Scheme of Examination		Credits
			L	T	Pr/Drg	CIE	SEE	
Theory Courses								
1	PC417CE	Estimation and Specification	2	-	-	30	70	2
2	ES310 CE	Disaster Preparedness & Planning	3	-	-	30	70	3
3	PE	Professional Elective -4	3	-	-	30	70	3
4	PE	Professional Elective -5	3	-	-	30	70	3
5	PE	Professional Elective -6	3	-	-	30	70	3
6	OE	Open Elective -II	3	-	-	30	70	3
7	MC 803 PY	Essence of Indian Traditional Knowledge	2	-	-	30	70	-
Practical/ Laboratory Courses								
8	PC460CE	Estimation and Specification Laboratory	-	-	2	25	50	1
9	PW 702CE	Summer Internship Evaluation	-	-	-	50		2
10	PW 703CE	Project Work - I			6	50		3
			18	-	6			23

*Technical Report and Seminar / based on summer industrial Internship/Mini Project

Professional Elective - 4		
S.No.	Course Code	Course Title
1	PE 513 CE	Prestressed Concrete
2	PE 514 CE	Highway Construction and Management
3	PE 515 CE	Environmental Impact Assessment of Civil Engineering Projects
4	PE 516 CE	Instrumentation & Sensor Technologies for Civil Engineering Applications

Professional Elective - 5			Professional Elective - 6		
S.No.	Course Code	Course Title	S.No.	Course Code	Course Title
1	PE 517 CE	Structural Engineering Design & Detailing	1	PE 521 CE	Finite Element Method
2	PE 518 CE	Intelligent Transportation Systems	2	PE 522 CE	Urban Transportation Planning
3	PE 519 CE	Water and Air Quality Modelling	3	PE 523 CE	Surface Hydrology
4	PE 520 CE	Principles of Green Buildings	4	PE 524 CE	GIS and Remote Sensing

Open Elective - II		
1	OE603 EE	Non-Conventional Energy Sources (Not for EEE & EIE Students)
2	OE604 EE	Transducers and Sensors (Not for EEE & EIE Students)
3	OE621 AE	Automotive Safety and Ergonomics (Not for Mech./Prod./Automobile Engg. students)
4	OE621 ME	Entrepreneurship (Not for Mech./Prod./Automobile Engg. students)
5	OE602 CE	Green Building Technologies (Not for Civil Engg. Students)
6	OE602 CS	Data Science Using R (Not for CSE Students)
7	OE 603 IT	Cyber Security (Not for IT Students)

B.E. (Civil Engineering) VIII- SEMESTER

S. No.	Course Code	Course Title	Scheme of Instruction			Scheme of Examination		Credits
			L	T	Pr/ Drg	CIE	SEE	
Theory Courses								
1	MC 801 PO	Constitution of India	2	-	-	30	-	-
2	PE	Professional Elective – 7	3	-	-	30	70	3
3	OE	Open Elective -III	3	-	-	30	70	3
Practical/ Laboratory Courses								
4	PW 704 CE	Project Work - II	-	-	8	50	100	4
			8	-	10			10

Professional Elective – 7		
S.No.	Course Code	Course Title
1	PE 525 CE	Advanced Reinforced Concrete Design
2	PE 526 CE	Ground Improvement Techniques
3	PE 527 CE	Principles of Climate change
4	PE 528 CE	Repair and Rehabilitation Techniques

Open Elective – III		
1	OE605 EE	Smart Building Systems (Not for EEE & EIE Students)
2	OE606 EE	Programmable Logic Controllers (Not for EEE & EIE Students)
3	OE631 AE	Automotive Maintenance (Not for Mech./Prod./Automobile Engg. students)
4	OE631 ME	Mechatronics (Not for Mech./Prod./Automobile Engg. students)
5	OE603 CE	Road Safety Engineering (Not for Civil Engg. Students)
6	OE604 IT	Software Engineering (Not for IT Students)