



TKR COLLEGE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS)

(Sponsored by TKR Educational Society, Approved by AICTE, Affiliated by JNTUH,
Accredited by NBA & NAAC with 'A' Grade)



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

MINUTES OF BOS MEETING

The 1st Meeting of the **Board of Studies (BoS)** of the department of Computer Science and Engineering was held on **06-08-2017**.

MEMBERS OF BOS:

S. No	Member	Designation	Position in the BOS	Signature
1	Dr. S. Somaraju	Professor, Dept. of CSE, TKRCET	Chairman, BOS	<i>S. Somaraju</i>
2	Dr..A. Suresh Rao	Professor, Dean Academics & Vice Principal, TKRCET	HOD-CSE	<i>A. Suresh Rao 6/8/17</i>
3	Prof. S V L Narasimham	Professor, JNTUH	University Nominee	<i>S. V. L. Narasimham</i>
4	Prof. R:B.V. Subramaanyam,	Professor, Dept. of CSE NIT Warangal	External Subject Expert-I	<i>R. B. V. Subramaanyam</i>
5	Dr. M.A. Hameed,	Professor, Dept. of CSE, OU Hyderabad	External Subject Expert-II	<i>M. A. Hameed</i>
6	Prof. P RadhaKrishna	Professor, Principal Investigator IDRRBT. Hyderabad.	Industry Expert	<i>P. Radha Krishna</i>
7	Dr K V Prasad	Professor, Dept. of CSE, TKRCET	Internal Subject Expert-I	<i>K. V. Prasad</i>
8	Dr K M V Madan Kumar	Professor, Dept. of CSE, TKRCET	Internal Subject Expert-II	<i>K. M. V. Madan Kumar</i>
9	Mr K Ramesh	Professor, Dept. of CSE, TKRCET	Coordinator-PG	<i>K. Ramesh</i>
10	Mr V Ravi Kumar	Professor, Dept. of CSE, TKRCET	Senior Faculty	<i>V. Ravi Kumar</i>

Agenda Points:

1. Approval of Academic Regulations R17
2. Approval of Course Structure for I, II, III, IV years of R17
3. Approval of Detailed Syllabus for I year and II year
4. Approval of Continuous Internal Evaluation and External Evaluation
5. Identification of Value-Added Courses
6. Substitute subjects for Readmitted students
7. Identification of Workshops and guest lectures
8. Approval of teaching methods
9. Approval of tools used in teaching and learning process to assess course outcomes
10. Approval of Mandatory Courses
11. Ratification of Departments Vision, Mission, PEOs and PSOs
12. Approval of MTech Detailing of Syllabus(R17)
13. Other Points if any

Agenda 1: Approval of Academic Regulations R17

Resolution:

The members have approved the Academic Regulations for R17.

Discussion:

The BOS Chairman introduced and outlined the following points for discussion during the meeting
A Student after securing admission shall pursue the under graduate programme in B.Tech for a minimum period of VIII-semesters, (4 academic years) and a maximum period of 8 academic years starting from the date of commencement of first semester, failing which the student shall forfeit seat in B.Tech course. Each semester is structured to provide 24 credits from I semester to IV semester and 27 credits from V semester to VII semester, and VIII semester with 24 credits totaling to 201 credits for the entire B.Tech. Programme.

Each student shall secure 192 credits (with CGPA ≥ 5.0) required for the completion of the undergraduate programme and award of B.Tech. Degree.

Chairman BOS

Dr S Somaraju

Signature: 

HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

External Subject Expert-II

Dr M.A. Hameed

Signature: 

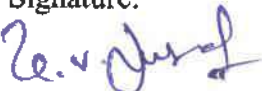
Industry Expert

Prof P RadhaKrishna

Signature: 

Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

A Student who opts for 27 credits from V semester to VII semester, is permitted to drop the professional electives of VIII semester by satisfying the requisite award of CGPA ≥ 8.0 and secure minimum number of required credits till completion of VII semester.

Subjects/courses to be offered

- A typical section (or class) strength for each semester shall be 60.
- A subject/ course may be offered to the students, only if a minimum of 20 students (1/3 of the Section strength) opt for it. The maximum strength of a section is limited to 80 (60 + 1/3 of the Section strength).
- More than one faculty member may offer the same subject (lab/practical may be included with The corresponding theory subject in the same semester) in any semester. However, selection of Choice for students will be based on – ‘first come first serve basis and CGPA criterion’ (i.e. the First focus shall be on on-line entry from the student for registration in that semester, and the Second focus, if needed, will be on CGPA of the student)
- If more entries for registration of a subject come into picture, then the Head of Department Concerned shall decide, whether or not to offer such a subject/ course for two (or multiple) Sections.
- An Elective Course is offered to the students if and only if a minimum of 1/3 strength of the Sanctioned intake is opted.

Academic requirements

The following academic requirements have to be satisfied, in addition to the attendance Requirements mentioned in item no 6.

- A student shall be deemed to have satisfied the minimum academic requirements if he has earned The credits allotted to each subject/course, secures not less than 35% marks (24 out of 70) in the

Chairman BOS

Dr S Somaraju

Signature: 

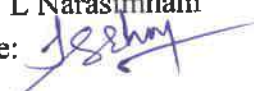
HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

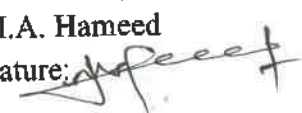
External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

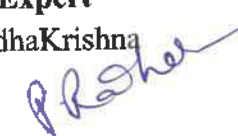
External Subject Expert-II

Dr M.A. Hameed

Signature: 

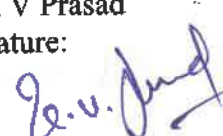
Industry Expert

Prof P RadhaKrishna

Signature: 

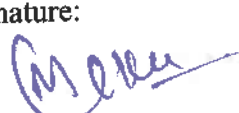
Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

Semester end examination, and a minimum of 40% of marks in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together; in Terms of letter grades, this implies securing 'C' grade or above in that subject/course.

- A student shall be deemed to have satisfied the academic requirements and earned the credits Allotted to UG mini-project and seminar, if student secures not less than 50% marks (i.e. 50 Out of 100 marks) in each of them. The student would be treated as failed, if student (i) does Not Submit a report on UG mini-project, or does not make a presentation of the same before The Evaluation committee as per schedule, or (ii) does not present the seminar as required in the VII Semester, or (iii) secures less than 50% marks in UG mini-project/seminar evaluations.
- Student may reappear once for each of the above evaluations, when they are scheduled again; If Student fails in such 'one reappearance' evaluation also, student has to reappear for the Same in The next subsequence semester, as and when it is scheduled.

Agenda 2: Approval of Course Structure for I, II, III, IV years of R17

Resolution:

The members reviewed and approved the Course Structure for I, II, III, and IV years under R17.

Discussion:

To maintain accreditation standards, BOS chairman proposed course structure:

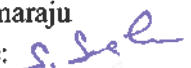
The proposed course structure has been derived from the regulations framed by AICTE, UGC and the affiliating University (JNTUH) guidelines. The Course structure is framed to cater the needs of the industry and to prepare the engineering graduates to get globally competent to meet the requirements. The total courses of the program are categorised and distributed across eight semesters, is classified based on the following composition.

• **Subject-Course Classification**

All courses offered for the under graduate programme in E & T (B.Tech. degree programmes) are following all the guidelines issued by AICTE/UGC, in implementing the course classification for Choice Based Credit System are as given in the below table. The Classification is made with the

Chairman BOS

Dr S Somaraju

Signature: 

HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

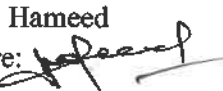
External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

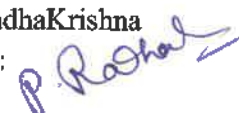
External Subject Expert-II

Dr M.A. Hameed

Signature: 

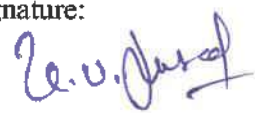
Industry Expert

Prof P RadhaKrishna

Signature: 

Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

following nomenclatures The Foundation Course (FnC), Core Courses (CoC), Elective Courses (ElC), Minor Courses (MrC) and Mandatory Courses.

- Weightage of HSC, BSC, ESC, PCC, PEC, OEC & PW

S.No.	Classification		Course Work-Subject Area	AICTE Range of Credits		Adopted by
	AICTE/UGC codes			Min	Max	TKR CET
1	HS		Humanities and Social Sciences Courses	5	10	10
2	BS		Basic Sciences Courses (BSC) including Mathematics, Physics, Chemistry, Biology;	15	20	29
3	ES		Engineering Sciences Courses (ES), including Materials, Workshop, Drawing, Basics of Electrical/ Electronics/Mechanical/Computer Engineering	15	20	18
4	PC	Core Courses	Professional Core Courses (PCC), relevant to the Chosen specialization/branch;(May be split into Hard (no choice) and Soft (with choice), if required	30	40	93
5	PW		Project Work, Seminar and/or Internship in Industry or elsewhere.	10	15	15
6	PE	Elective Courses	Professional Electives Courses (PEC) relevant to The chosen specialization/branch;	10	15	14
7	OE		Open Electives Courses (OEC), from other technical and/or emerging areas	5	10	12

Chairman BOS

Dr S Somaraju

Signature: 

HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

External Subject Expert-II

Dr M.A. Hameed

Signature: 

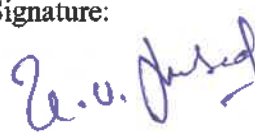
Industry Expert

Prof P RadhaKrishna

Signature: 

Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

Branch**UG Branch:**

1-Civil Engineering; 2-Electrical & Electronics Engineering; 3-Mechanical Engineering;
4-Electronics & Communication Engineering; 5-Computer Science & Engineering;
6-Information Technology;

PG Specialization with Branch:

12-Power Electronics; 25- Computer Science & Engineering; 35-Software Engineering;
14- Master of Business Administration.

Semester: 1, 2,3,4,5,6,7,8.

AICTE Classification:

HS (Humanities & Sciences); BS (Basic Sciences); ES (Engineering Sciences);
PC (Professional Core); PE (Professional Elective); PW (Project Work); OE (Open Elective);
S.No: it indicates the number of subjects offered in that semester from 1-9.

Example:

A21BS3 this is subject code for Engineering Physics-I of I semester Electrical & Electronics Engineering of UG Course; Wherein A is the R17 Regulation; 2 is the branch code of Electrical & Electronics Engineering; 1 is the Semester; BS- is the AICTE Classification given for Engineering Physics-I; 3 is the S.No. of the Subject

Chairman BOS

Dr S Somaraju

Signature: 

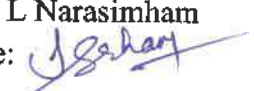
HOD CSE

Dr A. Suresh Rao

Signature: 

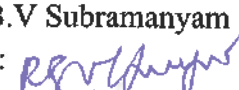
University Nominee

Prof S V L Narasimham

Signature: 

External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

External Subject Expert-II

Dr M.A. Hameed

Signature: 

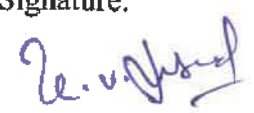
Industry Expert

Prof P RadhaKrishna

Signature: 

Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr KMV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

R17 Course Structure for the I, II, III, IV semesters:

SEMESTER I

S.No.	Course Classification	Course Code	Name of the subject	L	T	P	C	I	E	Total
1	BS	A51BS1	Mathematics-I	3	1	0	3	20	80	100
2	BS	A51BS2	Engineering Chemistry	4	0	0	4	20	80	100
3	BS	A51BS3	Engineering Physics-I	3	0	0	3	20	80	100
4	HS	A51HS4	Professional Communication in English	3	0	0	3	20	80	100
5	ES	A51ES5	Engineering Mechanics	3	0	0	3	20	80	100
6	ES	A51ES6	Basic Electrical and Electronics Engineering	4	0	0	4	20	80	100
7	HS	A51HS7	English Language Communication Skills Lab	0	0	3	2	20	80	100
8	ES	A51ES8	Engineering Workshop	0	0	3	2	20	80	100
9	MC	AMC01	NSS	0	0	0	0	20	80	100
		Total Credits		20	01	06	24	180	720	900

Chairman BOS

Dr S Somaraju

Signature: 

HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

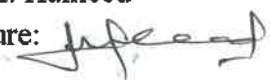
External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

External Subject Expert-II

Dr M.A. Hameed

Signature: 

Industry Expert

Prof P RadhaKrishna

Signature: 

Internal Subject Expert-I

Dr K V Prasad

Signature: 

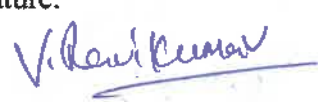
Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

SEMESTER II

S.No.	Course Classification	Course Code	Name of the subject	L	T	P	C	I	E	Total
1	BS	A52BS1	Engineering Physic-II	3	1	0	3	20	80	100
2	BS	A52BS2	Mathematics-II	4	1	0	4	20	80	100
3	BS	A52BS3	Mathematics-III	4	1	0	4	20	80	100
4	ES	A52ES4	Computer Programming in C	3	0	0	3	20	80	100
5	ES	A52ES5	Engineering Graphics	2	0	4	4	20	80	100
6	BS	A52BS6	Engineering Chemistry Lab	0	0	3	2	20	80	100
7	BS	A52BS7	Engineering Physics Lab	0	0	3	2	20	80	100
8	ES	A52ES8	Computer Programming Lab	0	0	3	2	20	80	100
9	MC	AMC02	NCC/NSO	0	0	0	0	20	80	100
Total Credits				16	03	13	24	180	720	900

Chairman BOS

Dr S Somaraju

Signature: 

HOD CSE

Dr A. Suresh Rao

Signature: 

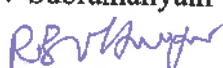
University Nominee

Prof S V L Narasimham

Signature: 

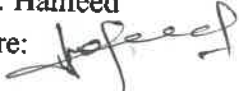
External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

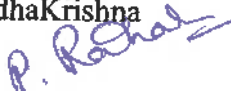
External Subject Expert-II

Dr M.A. Hameed

Signature: 

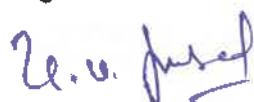
Industry Expert

Prof P RadhaKrishna

Signature: 

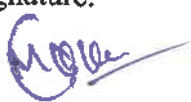
Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr KMV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

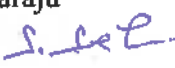
Signature: 

SEMESTER III

S.No.	Course Classification	Course Code	Name of the subject	L	T	P	C	I	E	Total
1	HS	A53HS1	Mathematics – IV	4	1	0	4	20	80	100
2	PC	A53PC2	Data Structures through C++	4	0	0	4	20	80	100
3	PC	A53PC3	Mathematical Foundations of Computer Science	4	0	0	4	20	80	100
4	PC	A53PC4	Digital Logic Design	3	0	0	3	20	80	100
5	PC	A53PC5	Object Oriented Programming through Java	3	0	0	3	20	80	100
6	PC	A53PC6	Data Structures through C++ Lab	0	0	3	2	20	80	100
7	PC	A53PC7	IT Workshop	0	0	3	2	20	80	100
8	PC	A53PC8	Java Programming Lab	0	0	3	2	20	80	100
9	MC	A53MC3	*Environmental Science and Technology	3	0	0	0	20	80	100
			Total Credits	21	01	09	24	180	720	900

Chairman BOS

Dr S Somaraju

Signature: 

HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

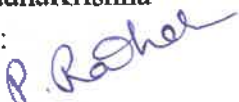
External Subject Expert-II

Dr M.A. Hameed

Signature: 

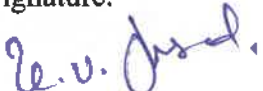
Industry Expert

Prof P RadhaKrishna

Signature: 

Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

SEMESTER IV

S.No.	Course Classification	Course Code	Name of the subject	L	T	P	C	I	E	Total
1	PC	A54PC1	Computer Organization	4	0	0	4	20	80	100
2	PC	A54PC2	Database Management Systems	4	0	0	4	20	80	100
3	PC	A54PC3	Operating Systems	4	0	0	4	20	80	100
4	PC	A54PC4	Formal Languages and Automata Theory	3	0	0	3	20	80	100
5	HS	A54HS5	Business Economics and Financial Analysis	3	0	0	3	20	80	100
6	PC	A54PC6	Computer Organization Lab	0	0	3	2	20	80	100
7	PC	A54PC7	Database Management Systems Lab	0	0	3	2	20	80	100
8	PC	A54PC8	Operating Systems Lab	0	0	3	2	20	80	100
9	MC	A54MC4	*Gender Sensitization Lab	0	0	3	0	20	80	100
Total Credits				18	0	12	24	180	720	900

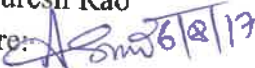
Chairman BOS

Dr S Somaraju

Signature: 

HOD CSE

Dr A. Suresh Rao

Signature: 

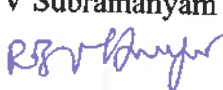
University Nominee

Prof S V L Narasimham

Signature: 

External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

External Subject Expert-II

Dr M.A. Hameed

Signature: 

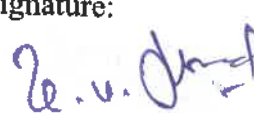
Industry Expert

Prof P RadhaKrishna

Signature: 

Internal Subject Expert-I

Dr K V Prasad

Signature: 

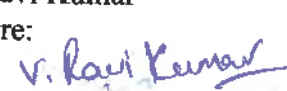
Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

SEMESTER V

S.No.	Course Classification	Course Code	Name of the subject	L	T	P	C	I	E	Total
1	PC	A55PC1	Computer Networks	4	1	0	4	20	80	100
2	PC	A55PC2	Principles of Programming Languages	4	1	0	4	20	80	100
3	PC	A55PC3	Design and Analysis of Algorithms	4	1	0	4	20	80	100
4	PC	A55PC4	Compiler Design	3	1	0	3	20	80	100
5	PE	A55PE5	1. Software Engineering 2. Computer Graphics 3. Image Processing and Pattern Recognition	3	0	0	3	20	80	100
6	OE		(Open Elective -I)	3	1	0	3	20	80	100
7	PC	A55PC6	Computer Networking Lab	0	0	3	2	20	80	100
8	PC	A55PC7	Compiler Design Lab	0	0	3	2	20	80	100
9	HS	A55HS8	Advanced Communication Skills Lab	0	0	3	2	20	80	100
Total Credits				21	05	09	27	180	720	900

Chairman BOS

Dr S Somaraju

Signature: 

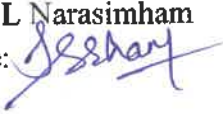
HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

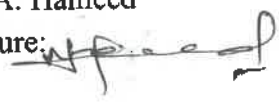
External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

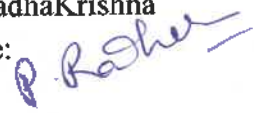
External Subject Expert-II

Dr M.A. Hameed

Signature: 

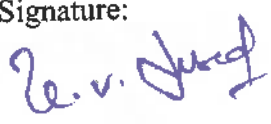
Industry Expert

Prof P RadhaKrishna

Signature: 

Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

SEMESTER VI

S.No.	Course Classification	Course Code	Name of the subject	L	T	P	C	I	E	Total
1	PC	A56PC1	Web Technologies	4	1	0	4	20	80	100
2	PC	A56PC2	Data Warehousing and Data Mining	4	1	0	4	20	80	100
3	PC	A56PC3	Object Oriented Analysis and Design	4	0	0	4	20	80	100
4	PE	A56PE4	1. Introduction to Analytics. 2. Information Security & Management 3. Cloud Computing	3	0	0	3	20	80	100
5	PE	A56PE5	1. Software Testing Methodologies 2. Artificial Intelligence 3. Semantic Web and Social Networks	3	0	0	3	20	80	100
6	OE		Open Elective -2	3	0	0	3	20	80	100
7	PC	A56PC7	Technical Skills Enhancement Lab	0	1	3	2	20	80	100
8	PC	A56PC8	Case Tools and Web Technologies Lab	0	0	3	2	20	80	100
9	PC	A56PC9	Data Warehousing and Data Mining Lab	0	0	3	2	20	80	100
Total Credits				21	03	09	27	180	720	900

Chairman BOS

Dr S Somaraju

Signature: 

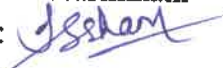
HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

External Subject Expert-II

Dr M.A. Hameed

Signature: 

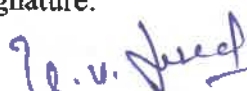
Industry Expert

Prof P RadhaKrishna

Signature: 

Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr KMV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

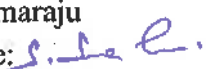
Signature: 

SEMESTER VII

S.No.	Course Classification	Course Code	Name of the subject	L	T	P	C	I	E	Total
1	PC	A57PC1	Network Security & Cryptography	4	0	0	4	20	80	100
2	PC	A57PC2	Linux Programming	4	1	0	4	20	80	100
3	PC	A57PC3	Machine Learning	3	1	0	3	20	80	100
4	PE	A57PE4	1. Introduction to Big Data Analytics 2. Information Security Assessment and Audits 3. Mobile Computing	3	0	0	3	20	80	100
5	PE	A57PE5	1. Internet Of Things 2. Design Patterns 3. Advance Computer Architecture	3	0	0	3	20	80	100
6	PE	A57PE6	1 Software Process and Project Management 2. Computer Forensics 3. Information Retrieval Systems	3	0	0	3	20	80	100
7	OE		Open Elective-3	3	1	0	3	20	80	100
8	PC	A57PC8	Linux Programming Lab	0	0	4	2	20	80	100
9	PE	A57PE8	Cutting Edge Technologies Lab	0	0	4	2	20	80	100
Total Credits				23	03	08	27	180	720	900

Chairman BOS

Dr S Somaraju

Signature: 

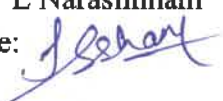
HOD CSE

Dr A. Suresh Rao

Signature: 

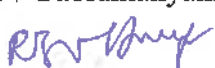
University Nominee

Prof S V L Narasimham

Signature: 

External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

External Subject Expert-II

Dr M.A. Hameed

Signature: 

Industry Expert

Prof P RadhaKrishna

Signature: 

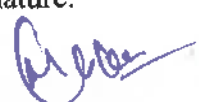
Internal Subject Expert-I

Dr K V Prasad

Signature: 

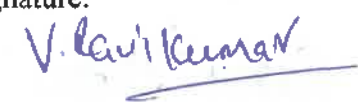
Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

SEMESTER VIII

S.No.	Course Classification	Course Code	Name of the subject	L	T	P	C	I	E	Total
1	OE		Open Elective-4	3	0	0	3	20	80	100
2	PE	A58PE2	1.Introduction to Predictive Analytics 2.Storage Area Networks 3. Information Security Incident Response and Management.	3	0	0	3	20	80	100
3	PE	A58PE3	1.Adhoc Sensor Networks 2.E- Commerce 3. Human Computer Interaction	3	0	0	3	20	80	100
4	PW	A58PW4	Industry Oriented Mini Project	0	0	0	2	20	80	100
5	PW	A58SC5	Seminar	0	0	6	2	-	50	50
6	PW	A58CV6	Comprehensive Viva	0	0	0	2	-	100	100
7	PW	A58PW7	Major Project	0	0	18	9	50	150	200
			Total Credits	09	0	24	24	130	620	750

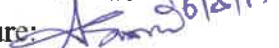
Chairman BOS

Dr S Somaraju

Signature: 

HOD CSE

Dr A. Suresh Rao

Signature:  56/8/19

University Nominee

Prof S V L Narasimham

Signature: 

External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

External Subject Expert-II

Dr M.A. Hameed

Signature: 

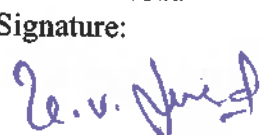
Industry Expert

Prof P RadhaKrishna

Signature: 

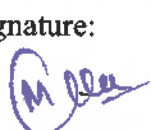
Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr KMV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

List of Professional Electives:

- Introduction to Predictive Analytics
- Storage Area Networks
- Information Security Incident Response and Management
- Adhoc Sensor Networks
- E-Commerce
- Human Computer Interaction
- Software Engineering
- Computer Graphics
- Image Processing and Pattern Recognition
- Introduction to Analytics
- Information Security & Management
- Cloud Computing
- Software Testing Methodologies
- Artificial Intelligence
- Semantic Web and Social Networks

Agenda 3: Approval of Detailed Syllabus for I year

Resolution:

The members examined and approved the Detailed Syllabus for the I Year under R17.

Discussion:

The BOS Chairman discussed the CPPS theory topics unit-wise. The members suggested including case studies and an introduction to computers before commencing the C programming language, to support students who lack fundamental knowledge of computers.”

Chairman BOS

Dr S Somaraju

Signature: 

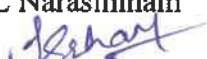
HOD CSE

Dr A. Suresh Rao

Signature:  26/8/17

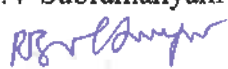
University Nominee

Prof S V L Narasimham

Signature: 

External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

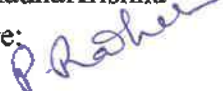
External Subject Expert-II

Dr M.A. Hameed

Signature: 

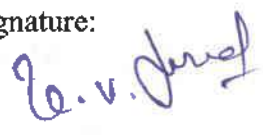
Industry Expert

Prof P RadhaKrishna

Signature: 

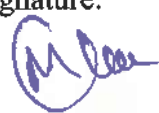
Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr KMV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

COMPUTER PROGRAMMING IN C

SEMESTER-II

Subject code: A52ES4

L/T/P C

3/0/0 3

Course Objectives:

Learn the fundamentals of computers and C Programming concepts.

Course Outcomes:

After learning the contents of this course, the student will be able to

1. Learn the taxonomy of computer and C fundamentals (L1)
2. Develop algorithms and write programs for data structures (L5)
3. Demonstrate functions and pointers to write c programming. (L3)
4. Demonstrate strings and Enumerated data types to write c programming. (L3)
5. Understand the file handling functions in c programming lang

UNIT – I

Introduction to Computers:

Data Representation, Number Systems, Computer Languages, Algorithms.

Introduction to C Language:

Data types, Operators, Expressions, Statements-Selection Statements – if and Switch Statements, Repetition (Loop) statements. Creative exercises.

UNIT – II

Fundamentals of Data structures

Linear and Non-Linear data structures, concepts of stacks and queues.

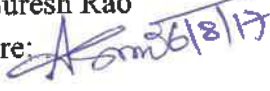
Chairman BOS

Dr S Somaraju

Signature: 

HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

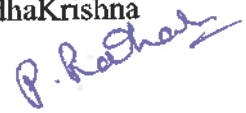
External Subject Expert-II

Dr M.A. Hameed

Signature: 

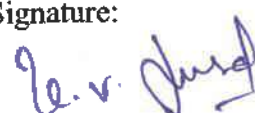
Industry Expert

Prof P RadhaKrishna

Signature: 

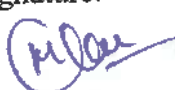
Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr KMV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

Arrays

One- and two-dimensional arrays, multidimensional arrays, inter function communication
Arrays- applications- linear search, binary search, bubble sort, Implementation of stacks and queues. Creative exercises.

UNIT – III

Functions:

Scope and Extent, storage classes, recursive functions

Pointers:

Introduction, Pointers for inter function communication, arrays of pointers, pointer arithmetic and arrays, passing an array to a function, memory allocation functions, pointers to functions. Pointers to pointers. Creative exercises

UNIT – IV

Strings:

Concepts, String Input/ Output functions, arrays of strings, string manipulation functions.

Enumerated types:

Structure and Unions. Initialization, accessing structures, operations on structures. Complex structures-Nested structures, structures containing arrays, structures containing pointers, arrays of structures, structures and functions, Passing structures through pointers, self-referential structures, unions, bit fields, C programming examples, command-line arguments, pre-processor commands. Creative Exercises

UNIT V

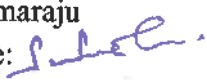
Input and output:

Concept of a file, streams, text files and binary files, file input/output functions (standard library input/output functions for files), error handling, positioning functions (fseek, rewind and ftell).

Case studies Scientific Calculator, student Information system, Employee information system, Search and Retrieval, Gaming.

Chairman BOS

Dr S Somaraju

Signature: 

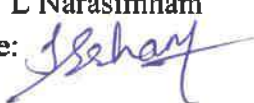
HOD CSE

Dr A. Suresh Rao

Signature:  26/8/17

University Nominee

Prof S V L Narasimham

Signature: 

External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

External Subject Expert-II

Dr M.A. Hameed

Signature: 

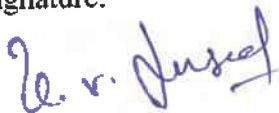
Industry Expert

Prof P RadhaKrishna

Signature: 

Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr KMV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

Text Books:

1. Computer Science: A Structured Programming Approach Using C, B. A. Forouzan and R. F. Gilberg, Third Edition, Cengage Learning.
2. Programming in C. P. Dey and M Ghosh, Second Edition, Oxford University Press.

Reference Books:

1. The C Programming Language, B.W. Kernighan and Dennis M. Ritchie, Second Edition, Pearson education.
2. Programming with C, B. Gottfried, 3rd edition, Schaum's outlines, McGraw Hill Education (India) Pvt Ltd.
3. C From Theory to Practice, G S. Tselikis and N D. Tselikas, CRC Press.
4. Basic computation and Programming with C, Subrata Saha and S. Mukherjee, Cambridge University Press

COMPUTER PROGRAMMING IN C LAB**SEMESTER-II****Subject code: A52ES8****L/T/P C****0/0/3/ 2****Course Objective:**

To write programs in C using structured programming approach to solve the problems.

Course Outcomes:

After learning the contents of this course, the student will be able to

1. Design and test programs to solve mathematical and scientific problems. (L5)
2. Write structured programs using control structures and functions. (L3)

Chairman BOS

Dr S Somaraju

Signature: **HOD CSE**

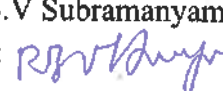
Dr A. Suresh Rao

Signature: **University Nominee**

Prof S V L Narasimham

Signature: **External Subject Expert-I**

Prof. R. B.V Subramanyam

Signature: **External Subject Expert-II**

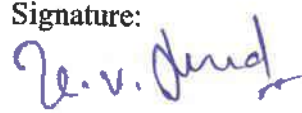
Dr M.A. Hameed

Signature: **Industry Expert**

Prof P RadhaKrishna

Signature: **Internal Subject Expert-I**

Dr K V Prasad

Signature: **Internal Subject Expert-II**

Dr K MV Madan Kumar

Signature: **Internal Subject Expert-III**

Mr V Ravi Kumar

Signature: 

Recommended Systems/Software Requirements:

- Intel based desktop PC
- GNU C Compiler

1. a) Write a C program to find the factorial of a positive integer.
b) Write a C program to find the roots of a quadratic equation.
2. a) Write a C program to determine if the given number is a prime number or not.
b) A Fibonacci sequence is defined as follows: the first and second terms in the sequence are 0 and 1. Subsequent terms are found by adding the preceding two terms in the sequence. Write a C program to generate the first n terms of the sequence.
3. a) Write a C program to construct a pyramid of numbers.
b) Write a C program to calculate the following

$$\text{Sum: } \text{Sum} = 1 - x^2/2! + x^4/4! - x^6/6! + x^8/8! - x^{10}/10!$$

4. a) The Least Common Multiple (LCM) of two positive integers a & b is the smallest integer That is evenly divisible by both a and b. Write a C program that reads two integers And Calls GCD (a, b) function that takes two integer arguments and returns their LCM. The lcm (a, b) function should calculate the least common multiple by calling the GCD (a, b) function and using the following relation:

$$\text{LCM (a,b)} = ab / \text{GCD (a,b)}$$

- b) Write a C program that reads two integers n and r to compute the ncr value using the following relation:

$$\text{ncr (n,r)} = n! / r! (n-r)! . \text{ Use a function for computing the factorial value of an integer.}$$

Chairman BOS

Dr S Somaraju

Signature: 

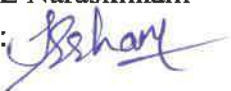
HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

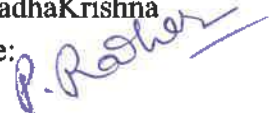
External Subject Expert-II

Dr M.A. Hameed

Signature: 

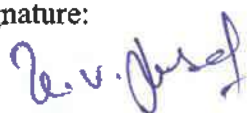
Industry Expert

Prof P RadhaKrishna

Signature: 

Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

Internal Subject Expert-III

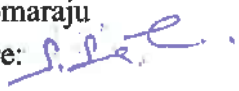
Mr V Ravi Kumar

Signature: 

5. a) Write C program that reads two integers x and n and calls a recursive function to Compute x^n
 b) Write a C program that uses a recursive function to solve the Towers of Hanoi problem.
 c) Write a C program that reads two integers and calls a recursive function to compute ncr Value.
6. a) Write a C program to generate all the prime numbers between 1 and n, where n is a value supplied by the user using Sieve of Eratosthenes algorithm.
 b) Write a C program that uses non recursive function to search for a Key value in a given list of integers. Use linear search method.
7. a) Write a menu-driven C program that allows a user to enter n numbers and then choose Between finding the smallest, largest, sum, or average. The menu and all the choices are to be functions. Use a switch statement to determine what action to take. Display an error Message if an invalid choice is entered.
 b) Write a C program that uses non recursive function to search for a Key value in a given Sorted list of integers. Use binary search method.
8. a) Write a C program that implements the Bubble sort method to sort a given list of integers in ascending order.
 b) Write a C program that reads two matrices and uses functions to perform the following:
 - i) Addition of two matrices
 - ii) Multiplication of two matrices
9. a) Write a C program that uses functions to perform the following operations:
 - i) to insert a sub-string into a given main string from a given position.
 - ii) to delete n characters from a given position in a given string.
 b) Write a C program that uses a non-recursive function to determine if the given string is a palindrome or not.
10. a) Write a C program to replace a substring with another in a given line of text.
 b) Write a C program that reads 15 names each of up to 30 characters, stores them in an array, and uses an array of pointers to display them in ascending (I e. alphabetical) order.

Chairman BOS

Dr S Somaraju

Signature: 

HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

External Subject Expert-II

Dr M.A. Hameed

Signature: 

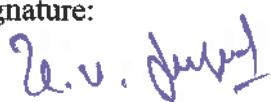
Industry Expert

Prof P RadhaKrishna

Signature: 

Internal Subject Expert-I

Dr K V Prasad

Signature: 

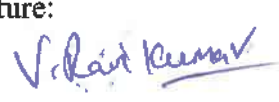
Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

- 11.a) 2's complement of a number is obtained by scanning it from right to left and Complementing all the bits after the first appearance of a 1. Thus 2's complement of 11100 is 00100. Write a C program to find the 2's complement of a binary number.
- b) Write a C program to convert a positive integer to a roman numeral. Ex. 11 is converted to XI.
- 12.a) Write a C program to display the contents of a file to standard output device.
- b) Write a C program which copies one file to another, replacing all lowercase characters with their uppercase equivalents.
- 13.a) Write a C program to count the number of times a character occurs in a text file. The file name and the character are supplied as command-line arguments.
- b) Write a C program to compare two files, printing the first line where they differ.
- 14.a) Write a C program to change the nth character (byte) in a text file. Use fseekfunction.
- b) Write a C program to reverse the first n characters in a file. The file name and n are Specified on the command line. Use fseek function.
- 15.a) Write a C program to merge two files into a third file (i.e., the contents of the first file Followed by those of the second are put in the third file).
- b) Define a macro that finds the maximum of two numbers. Write a C program that uses The macro and prints the maximum of two numbers.

Reference Books:

1. Mastering C, K.R. Venugopal and S.R. Prasad, TMH Publishers.
2. Computer Programming in C, V. Rajaraman, PHI.
3. Programming in C, Stephen G. Kochan, Fourth Edition, Pearson Education. C++: The Complete reference, H. Schildt, TMH Publishers.

Resolution: Approved the syllabus

Chairman BOS

Dr S Somaraju

Signature: 

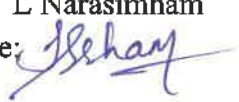
HOD CSE

Dr A. Suresh Rao

Signature: 

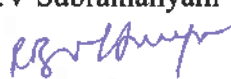
University Nominee

Prof S V L Narasimham

Signature: 

External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

External Subject Expert-II

Dr M.A. Hameed

Signature: 

Industry Expert

Prof P RadhaKrishna

Signature: 

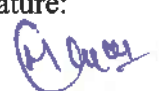
Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

Agenda 4: Internal and External Evaluation:

Discussion:

Chairman-BOS presented the guidelines for evaluation of internal and external exams

- Evaluation – Distribution and Weightage of marks:
- The performance of a student in every subject/course (including Practical) will be Evaluated for 100 marks each, with 30 marks allotted for CIE (Continuous Internal Evaluation) and 70 marks for SEE (Semester End Examination).
- For theory subjects, during a semester there shall be two mid-term and two minor Examinations. Each mid-term examination consists of one objective paper and one Descriptive paper carrying 15 marks for descriptive and 5 marks for objective paper with the time duration of 1 hour 20 minutes. Each minor examination consists of objective Paper/Assignment with 10 marks with a time duration of 60 minutes/one period. The Syllabus for first minor examination shall be from unit 1 and first mid examination will be 50% of syllabus. The second minor examination will have syllabus as the partial syllabus From 3rd unit i.e., (2nd half of portion other than covered in mid-1) and 4th unit i.e., 1st Half of portion). The syllabus for second mid examination will be remaining 50% of Syllabus. The marks secured by the student in each mid-term examination will be Evaluated for 20 marks, subsequently each minor examination will be evaluated for 10 Marks each.

The total marks secured by the student for the whole CIE (Continuous Internal Evaluation) will be the average of 2 mid-terms and 2 minor examinations. If any Student is absent/ would like to seek improvement from/in any subject of a mid-term Examination, an on-line test will be conducted for him by the examination branch of the College, which will be scheduled after completion of both mid-term and minor Examinations. The details of the end semester examination question paper pattern is as Follows,

- The end semester examinations will be conducted for 70 marks consisting of two parts viz.
 - i) Part –A for 20 Marks, ii) Part –B for 50 marks.
- Part –A is compulsory question which consists of ten sub-questions. All questions carry Equal marks.

Chairman BOS

Dr S Somaraju

Signature: 

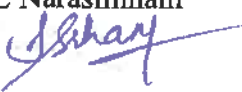
HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

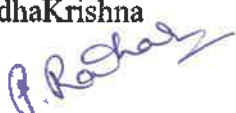
External Subject Expert-II

Dr M.A. Hameed

Signature: 

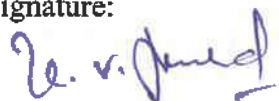
Industry Expert

Prof P RadhaKrishna

Signature: 

Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

- Part-B consists of five questions (number from 2 to 6) carrying 10 marks each. Each of these Questions is from one unit and may contain sub questions. For each question there will be an "either" "or" choice, which means that there will be two questions from each unit and the student should answer either of the two questions.
- For practical subjects there shall be a continuous internal evaluation during the semester For 30 marks and 70 marks for end semester practical examinations. The duration for both Internal and External Practical Examination is for 3 hours. For 30 marks of Internal Evaluation of practical subjects, day to day evaluation in laboratory will be assessed for 15 Marks and internal practical examination will be assessed for 15 marks. The internal Practical examination will be conducted by the concerned laboratory subject teacher (Internal Examiner) only. The external practical examination will have 2 examiners, one is External examiner and the other is internal examiner. The external examiner will be Appointed by the examination branch of the college.
- For the subjects having design and/or drawing, (such as engineering graphics, engineering drawing, machine drawing) and estimation, the distribution shall be 30 marks for continuous internal evaluation (15 marks for day-to-day evaluation and 15 marks for internal examination) and 70 marks for semester end examination. There shall be two internal examinations in a semester and the average of the two shall be considered for the award of marks for internal examinations.
- There shall be a UG mini-project work to be undertaken by the student during the break of VI and VII semester. The UG mini-project work should be carried out by student with an Industry of their specialization. The report on completion should be submitted in the starting of Academic year of VII Semester. The report shall be evaluated by departmental committee comprising of external examiner, Head of the Department, project supervisor, and a senior faculty member of the department. There shall be no internal evaluation of UG mini-project. The external Examiner will be appointed by the examination cell.
- The student has to undergo a seminar presentation during his VIII semester, and submit a technical report of presentation. For the seminar the student shall collect the information

Chairman BOS

Dr S Somaraju

Signature: 

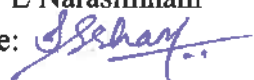
HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

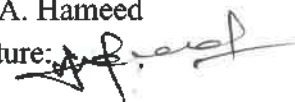
External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

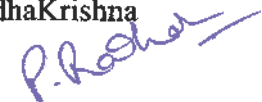
External Subject Expert-II

Dr M.A. Hameed

Signature: 

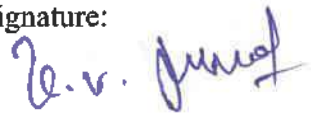
Industry Expert

Prof P RadhaKrishna

Signature: 

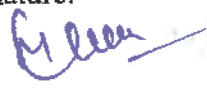
Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr KMV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

on a specialized topic of their specialization. The submitted technical report will be evaluated by the departmental committee comprising of Head of the Department, seminar supervisor, and a senior faculty member. The technical report will be evaluated for 50 marks. There shall be no internal evaluation for seminar and semester end examination.

- The student has to attend the Comprehensive Viva-Voce during VIII Semester. The Comprehensive Viva-Voce shall be conducted by a Committee consisting of Head of the Department and two senior faculty members of the Department. The Comprehensive Viva-Voce is intended to assess the students understanding of the subjects he studied during the B.Tech course of Study. The Comprehensive Viva-Voce is evaluated for 100 marks by the committee; there are no Internal marks for the Comprehensive Viva-Voce
- The student during his VIII semester has to register for a UG project, and subsequently get the permission for implementing the project by the departmental committee. The evaluation process of the UG project is done for 200 marks. Out of which 50 marks are allotted for internal evaluation, 150 marks for external evaluation (viva voce). The end semester examination of UG major project shall be conducted by the same committee as appointed for the UG mini-project. In addition, the UG major project supervisor shall also be included in the committee. The topics for UG mini-project work, seminar, and major project work shall be different from one another. The evaluation of UG major project will be done at the end of VIII semester.
- The laboratory marks, sessional marks, and the end examination marks awarded by the college are subject to scrutiny and scaling, if necessary, by a committee, constituted in this regard, with a university representative/under the guidance of Director of Evaluation of the affiliating university. The recommendations of the committee are final and binding. The laboratory records, internal examination scripts and external examination scripts shall be preserved as per the rules and shall be produced before the committee as and when required.
- A student has to secure at least 40% i.e., 40 marks for 100 marks in mandatory courses like environmental science, professional ethics and gender sensitization lab.

Chairman BOS

Dr S Somaraju

Signature: 

HOD CSE

Dr A. Suresh Rao

Signature: 

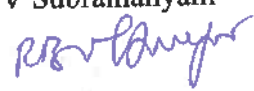
University Nominee

Prof S V L Narasimham

Signature: 

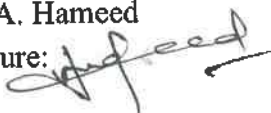
External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

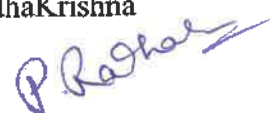
External Subject Expert-II

Dr M.A. Hameed

Signature: 

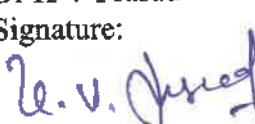
Industry Expert

Prof P RadhaKrishna

Signature: 

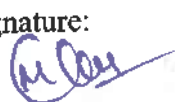
Internal Subject Expert-I

Dr K V Prasad

Signature: 

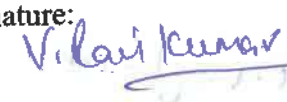
Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

- For mandatory courses like NCC/NCO, NSS the student should sustain his attendance by participating in the activities of the particular course $\geq 65\%$ as minimum and obtain a 'satisfactory' participation certificate from the concerned authorities
- For all non-credit courses and mandatory courses no marks or letter grade is allotted

Agenda 5: Identification of Value-Added Courses

Resolution:

The BOS **approved the above Value-Added Courses** for implementation in the upcoming academic sessions and recommended periodic review to ensure alignment with industry trends and technological advancements.

Discussion:

The BOS discussed the importance of **Value-Added Courses (VACs)** to enhance students' professional skills, technical expertise, and industry readiness beyond the regular curriculum. These courses are intended to provide **hands-on experience, exposure to emerging technologies, and practical understanding** of modern software and systems.

The following VACs were identified:

1. **Chat Bots** – To provide students with practical knowledge of designing, developing, and Deploying AI-driven conversational agents.
2. **System Development Methodology** – To equip students with understanding of software Development life cycles, methodologies (Agile, Waterfall, Scrum), and best practices for Efficient project implementation.

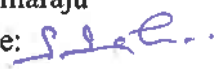
Agenda 6: Substitute subjects for the Readmitted students

Resolution:

The members deliberated on the provision of substitute subjects for readmitted students in

Chairman BOS

Dr S Somaraju

Signature: 

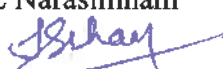
HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

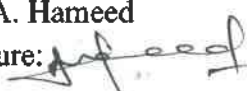
External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

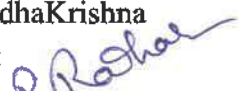
External Subject Expert-II

Dr M.A. Hameed

Signature: 

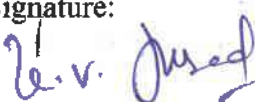
Industry Expert

Prof P RadhaKrishna

Signature: 

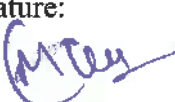
Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr KMV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

cases where the original course is revised or not offered in the new curriculum. It was resolved that equivalent or relevant substitute subjects shall be identified by the department, ensuring that the substitute course maps with the intended course outcomes and program outcomes of the earlier subject. This will enable academic continuity without affecting credit requirements and degree completion.

Agenda 7: Identification of Workshops and guest lectures

Resolution:

The members discussed the need to complement classroom learning with workshops and guest lectures by industry experts, academicians, and researchers. It was resolved to identify emerging areas and advanced technologies relevant to the curriculum, and to organize workshops and expert lectures periodically to enhance students' practical knowledge, industry readiness, and exposure to current trends.

Agenda 8: Approval of teaching methods

Resolution:

The members discussed and suggested adopting a blend of teaching methods for the students, including classroom lectures, tutorials, and problem-solving sessions for conceptual clarity; laboratory experiments and project-based learning for practical exposure; the use of ICT tools, simulations, and virtual labs for technology-enabled learning; and modern approaches such as flipped classroom and blended learning. It was also emphasized to enhance industry interaction through internships, workshops, industrial visits, hackathons, seminars, and group discussions to promote active learning and skill development.

Agenda 9: Approval of tools used in teaching and learning process to assess course outcomes.

Resolution:

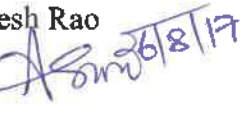
Chairman BOS

Dr S Somaraju

Signature: 

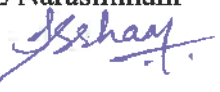
HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

External Subject Expert-II

Dr M.A. Hameed

Signature: 

Industry Expert

Prof P RadhaKrishna

Signature: 

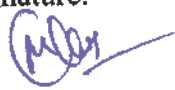
Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

The members emphasized the use of a variety of tools such as classroom tests, quizzes, assignments, and viva for continuous evaluation; laboratory experiments, mini and major projects for practical assessment; rubrics-based evaluation for presentations and seminars; online platforms for quizzes, coding practice, and discussions; and end-semester examinations for overall outcome attainment. It was resolved to integrate direct assessment methods (tests, labs, projects) with indirect tools (student feedback, surveys) to ensure comprehensive evaluation of course outcomes.

The following assessment tools and calculation were discussed:

Direct Assessment Tools: Internal assessments, quizzes, assignments, lab performance, mini-projects, semester exams.

Indirect Assessment Tools: Student feedback, exit surveys, alumni feedback, employer feedback.

Direct CO attainment calculation:

Direct attainment of CO = $(0.2 \times \text{mid-term} + 0.1 \times \text{assignment}) \times 0.8 + (0.7 \times \text{semester End Examinations}) \times 0.2$

Indirect CO attainment calculation:

Indirect attainment of CO = Average of Course end Survey given by all the students for all the Course Outcomes of each course.

Overall CO attainment = $0.9 \times \text{Direct attainment of CO} + 0.1 \times \text{Indirect attainment of CO}$.

Continuous Improvement Assessment Methodology:

In view of new Academic Regulations of R17, the course outcomes are computed as follows, Target: Minimum is 40% of marks (i.e., minimum pass mark)

Course Outcome Attainment is given with 3 levels

R17 (level3 $\geq 45\%$, level2 $\geq 40\%$ and level 1 $< 40\%$).

For the overall Programme the PO attainment target should be as follows: 80% of Programme Articulation Matrix.

Chairman BOS

Dr S Somaraju

Signature: 

HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

External Subject Expert-II

Dr M.A. Hameed

Signature: 

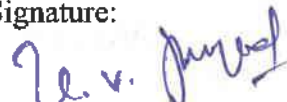
Industry Expert

Prof P RadhaKrishna

Signature: 

Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

Agenda 10: Mandatory Courses

Resolution: BOS members appr

Discussion:

The following courses are proposed which are non-credit courses.

Environmental Science and Technology, Gender Sensitization Lab. For all non-credit courses and mandatory courses, no marks or letter grade is allotted

Agenda 11: Validating Vision, Mission, PEOs, and PSOs

Resolution:

The PEOs and PSOs were validated and recommended for adoption.

Discussion:

The BOS Chairman presented the Program Educational Objectives (PEOs) and Program Specific Outcomes (PSOs) before the BOS Committee for review and endorsement. The members deliberated on the alignment of PEOs and PSOs with the Vision, Mission, Program Outcomes (POs), and industry requirements, ensuring relevance to academic, professional, and societal needs

Vision:

To achieve and evolve as a center of academic excellence and research center in the field of Computer Science and Engineering.

Mission:

- o Providing the students with in depth understanding of fundamentals and practical training Related to professional skills and their applications through effective Teaching-Learning Process and state of the art laboratories pertaining to CSE and inter disciplinary areas.

Chairman BOS

Dr S Somaraju

Signature: 

HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

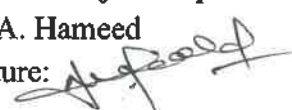
External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

External Subject Expert-II

Dr M.A. Hameed

Signature: 

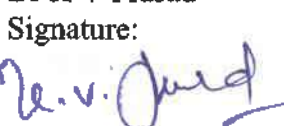
Industry Expert

Prof P RadhaKrishna

Signature: 

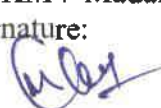
Internal Subject Expert-I

Dr K V Prasad

Signature: 

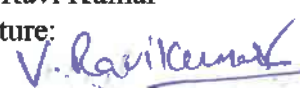
Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

- Preparing students in developing research, design, entrepreneurial skills and employability Capabilities.
- Providing consultancy services and promoting Industry-Department interactions.

PEOs:

PEO1: To create and sustain a community of learning in which students acquire knowledge And apply in their concerned fields with due consideration for ethical, ecological and Economic issues.

PEO2: To provide knowledge-based services so as to meet the needs of the society and Industry.

PEO3: To make the students understand, design and implement the concepts in multiple Arenas.

PEO4: To educate the students in disseminating the research findings with good soft skills so As to become successful entrepreneurs

PSOs:

PSO1: Developing software applications with key focus on privacy, cost and utility.

PSO2: Storing, Processing, Analyzing and learning from data for effective decision-making.

Agenda 12: Approval of M.Tech Course Structure and Detailing of Syllabus-R17

Resolution:

After thorough deliberation, the Board of Studies **unanimously approved the M.Tech (CSE)** course structure and detailed syllabus with the following provisions:

1. The syllabus and course structure shall be implemented from the upcoming academic session.

Chairman BOS

Dr S Somaraju

Signature: 

HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

External Subject Expert-II

Dr M.A. Hameed

Signature: 

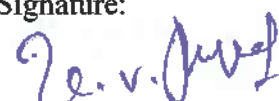
Industry Expert

Prof P RadhaKrishna

Signature: 

Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

- Minor modifications suggested during the meeting shall be incorporated by the Department Academic Committee (DAC) before final publication.
- The department shall ensure continuous review and update of the syllabus every two years to incorporate emerging trends and industry requirements.

Discussion:

The Board of Studies (BOS) reviewed the proposed M.Tech (CSE) course structure and detailed syllabus for all semesters. Key points discussed included:

Course Structure (R17):

I year I semester

Course Code	Course Title	Int. marks	Ext. marks	L	P	C
A251PC1	Data Structures and Algorithms	30	70	4	--	4
A251PC2	Data Science	30	70	4	--	4
A251PC3	Distributed Systems	30	70	4	--	4
A251PE4	Information Security Mobile Applications Development Wireless Networks Multimedia and Gaming	30	70	3	2	4
A251PE5	Machine Learning Natural Language Processing Design Patterns Advanced Computer Architecture	30	70	3	2	4
A251OE6	Open Elective – 1	30	70	4	--	4
A251PC7	Software Lab-1	30	70	--	4	2
A251SE8	Seminar	50	--	--	4	2
	Total Credits			24	8	28

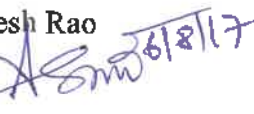
Chairman BOS

Dr S Somaraju

Signature: 

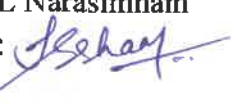
HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

External Subject Expert-II

Dr M.A. Hameed

Signature: 

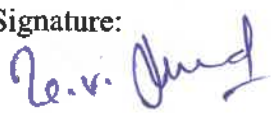
Industry Expert

Prof P RadhaKrishna

Signature: 

Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

I year II semester

Course Code	Course Title	Int. marks	Ext. marks	L	P	C
A252PC1	Network Programming	30	70	4	--	4
A252PC2	Mining with Big Data	30	70	4	--	4
A252PC3	Internet Technologies and Services	30	70	4	--	4
A252PE4	Core Elective- 3 Cyber Security Advanced Databases Social Network Analysis Cloud Computing	30	70	3	2	4
A252PE5	Core Elective- 4 Deep Learning Internet of Things Service Oriented Computing Distributed Computing	30	70	3	2	4
A252OE6	Open Elective - 2	30	70	4	--	4
A252PC7	Software Lab-2	30	70	--	4	2
A252SE8	Seminar	50	--	--	4	2
	Total Credits			24	8	28

Note: In core elective courses two practical hours to be conducted for every week and Implement the concepts discussed in theory hours.

II Year - I Semester

Course Title	Course Title	Int. marks	Ext. marks	L	P	C
A253CV1	Comprehensive Viva-Voce	--	100	--	--	4
A253PW2	Project work Review I	50	--	--	24	12
	Total Credits	---	---	---	24	16

Chairman BOS

Dr S Somaraju

Signature: 

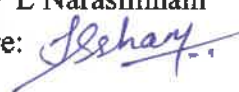
HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

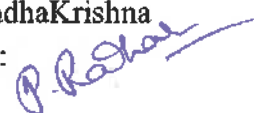
External Subject Expert-II

Dr M.A. Hameed

Signature: 

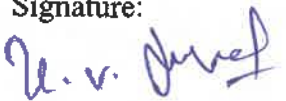
Industry Expert

Prof P RadhaKrishna

Signature: 

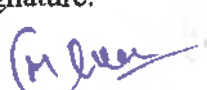
Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr KMV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

II Year - II Semester

Course Title	Course Title	Int. marks	Ext. marks	L	P	C
A254PW1	Project work Review II	50	--	--	8	4
A254PW2	Project Evaluation (Viva-Voce)	--	150	--	16	12
	Total Credits	--			24	16

Open Electives:

1. Basic Computer Programming skills are required for all open electives. Additionally, knowledge on the specified area mentioned in prerequisites is required for opting open elective.
2. **Note:** A student can register for any open elective subject provided that he has not already Registered for the same subject

S.NO	Open Electives	Prerequisites
1.	"R" Programming	Maths, Statistics
2.	Android Application Development	Java
3.	Algorithmics	----
4.	Big Data Analytics	Data Bases , Maths
5.	Bioinformatics	Data Structures
6.	Biometrics	----
7.	Cyber Security	Internet Technologies
8.	Computer Forensics	Maths, Data Structures
9.	Distributed Systems Security	Information Security
10.	E-Commerce	Internet Technologies
11.	Embedded Systems	Digital logic
12.	Information Security	Maths
13.	Intellectual Property Rights	---

Chairman BOS

Dr S Somaraju

Signature: 

HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

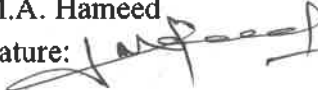
External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

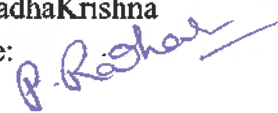
External Subject Expert-II

Dr M.A. Hameed

Signature: 

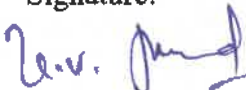
Industry Expert

Prof P RadhaKrishna

Signature: 

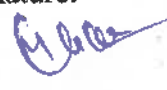
Internal Subject Expert-I

Dr K V Prasad

Signature: 

Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

14.	Internet of Things	Java
15.	Java Programming	---
16.	Linux Programming	---
17.	Mobile Computing	Java
18.	Mobile Application Security	Mobile Application Development
19.	OpenStack cloud computing	Linux Programming
20.	Operations Research	Maths, Data Structures
21.	Principles of Information Security	-----
22.	Scripting Languages	---
23.	Social Media Intelligence	---
24.	Software Engineering	---
25.	Storage Area Networks	Computer Networks
26.	Web Usability	-----

- The course structure was examined for compliance with the institute's academic regulations, credit distribution, and AICTE guidelines.
- The syllabus content was reviewed to ensure it covers advanced topics in Computer Science, promotes research and innovation, and is aligned with current industry requirements.
- The Board analyzed the balance between core subjects, electives, and research/project work, ensuring students gain both theoretical knowledge and practical exposure.
- Emphasis was placed on integration of emerging technologies, hands-on lab work, and fostering analytical, problem-solving, and research skills.
- Suggestions were made for minor modifications in certain electives to improve clarity, learning outcomes, and alignment with Program Outcomes (POs) and Program Educational Objectives (PEOs) (Annexure Enclosed).

Agenda 13: Other Points if any

Resolution:

The members invited and considered any additional points for discussion. No further significant matters were proposed, and the meeting proceeded to closure.

Chairman BOS

Dr S Somaraju

Signature: 

HOD CSE

Dr A. Suresh Rao

Signature: 

University Nominee

Prof S V L Narasimham

Signature: 

External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

External Subject Expert-II

Dr M.A. Hameed

Signature: 

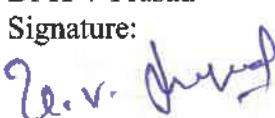
Industry Expert

Prof P RadhaKrishna

Signature: 

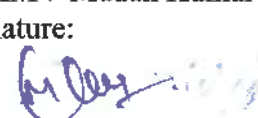
Internal Subject Expert-I

Dr K V Prasad

Signature: 

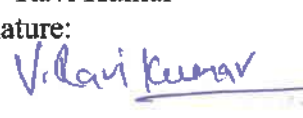
Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 

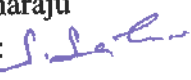
HOD
Department of CSE

Attachments:

- 1.R17 Academic Regulations
- 2.R17 Course Structure for UG and PG Programs.
- 3.Detailed syllabus of I year subjects.

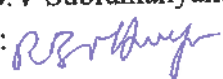
Chairman BOS

Dr S Somaraju

Signature: 

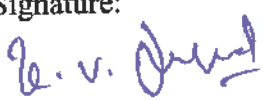
External Subject Expert-I

Prof. R. B.V Subramanyam

Signature: 

Internal Subject Expert-I

Dr K V Prasad

Signature: 

HOD CSE

Dr A. Suresh Rao

Signature:  6/8/17

External Subject Expert-II

Dr M.A. Hameed

Signature: 

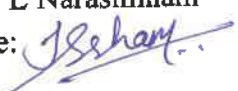
Internal Subject Expert-II

Dr K MV Madan Kumar

Signature: 

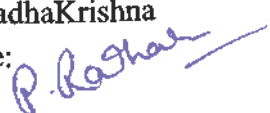
University Nominee

Prof S V L Narasimham

Signature: 

Industry Expert

Prof P RadhaKrishna

Signature: 

Internal Subject Expert-III

Mr V Ravi Kumar

Signature: 