

St. MARTIN'S ENGINEERING COLLEGE

(Autonomous Institution - UGC, Govt. of India)





DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date: 02/12/2022

MINUTES OF MEETING - BOARD OF STUDIES (BOS)

The Meeting of the Board of Studies of CSE was held on 02nd December 2022 at 11.00 AM at IQAC, MG Block. The following members were present.

| S. No. | Name of the Members | Designation | Signature |
|--------|---|--------------------|---------------|
| 1 | Dr. R. Santhoshkumar Associate Professor & HoD, Department of CSE, SMEC | Chairman | Renta |
| 2 | Dr. P. Sammulal Professor of CSE, JNTUH, CEJ | University Nominee | 8 7, |
| 3 | Dr. G. R. Anantha Raman Professor & HoD, Dept. of CSE, MRIET, Secunderabad. | Educationist | Dreity |
| 4 | Dr. V. Sathiya Suntharam Professor & HoD, Dept. of CSE(Cyber Security), CMREC, Hyderabad. | Educationist | Batt. 48 |
| 5 | Mr. B. Vivekananda Kumar Technical Associate, GENPACT India Pvt. Ltd. | Industrialist | B. Vivekovog |
| 6 | Dr. S.V.S. Rama Krishnam Raju Professor of ECE & Dean Academics, SMEC | Member | lily |
| 7 | Dr. D. Ranadheer Reddy Professor & HOD, Department of S&H, SMEC | Member | Prof |
| 8 | Dr. N. Satheesh Professor, Department of CSE, SMEC | Faculty Member | (A. Salg |
| 9 | Dr. G. JawaherlalNehru Associate Professor, Department of CSE, SMEC | Faculty Member | 42 |
| 10 | Dr. K. Gurnadha Gupta Associate Professor, Department of CSE, SMEC | Faculty Member | K.C. JE (le |
| 11 | Dr. P. Sai Prasad Associate Professor, Department of CSE, SMEC | Faculty Member | oz lo hom |
| 12 | Dr. M. Vadivukarassi Associate Professor, Department of CSE, SMEC | Faculty Member | M. Vadis |
| 13 | Ms. Prathyusha Gade Business Intelligence Engineer 1 Amazon, Hyderabad | Alumni Member | G.R. Theywile |

The Meeting began with chairman, Board of studies extending a warm welcome to all the members of participating in the meeting.

The following points were discussed and approved during the meeting

1. The following SMEC R22 Course Structure and the detailed syllabi of B.Tech for I-I, I-II, II-I and II-II were presented, discussed and approved. The total credits for the programme were discussed, finalized and approved.

I YEAR I SEMESTER

| C No | Course | Common Title | Hours per Week | | | Cua dita | Maximum Marks | | |
|--------|---------|--|----------------|---|----|----------|-------------------|----------------|-------|
| S. No. | Code | Course Title | L | Т | P | Credits | Internal (CIE) | External (SEE) | Total |
| 1 | MA101BS | Matrices and Calculus | 3 | 1 | 0 | 4 | 40 | 60 | 100 |
| 2 | CH102BS | Engineering Chemistry | 3 | 1 | 0 | 4 | 40 | 60 | 100 |
| 3 | CS105ES | Programming for Problem Solving | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 4 | EE106ES | Basic Electrical Engineering | 2 | 0 | 0 | 2 | 40 | 60 | 100 |
| 5 | ME108ES | Computer Aided Engineering Graphics | 1 | 0 | 4 | 3 | 40 | 60 | 100 |
| 6 | CS106ES | Elements of Computer Science & Engineering | 0 | 0 | 2 | 1 | 50 | 1 | 50 |
| 7 | CH104BS | Engineering Chemistry Laboratory | 0 | 0 | 2 | 1 | 40 | 60 | 100 |
| 8 | CS107ES | Programming for Problem Solving Laboratory | 0 | 0 | 2 | 1 | 40 | 60 | 100 |
| 9 | EE108ES | Basic Electrical Engineering Laboratory | 0 | 0 | 2 | 1 | 40 | 60 | 100 |
| 10 | | Induction Programme | 1 | 1 | - | - | = | = | - |
| | _ | Total | 12 | 2 | 12 | 20 | 370 | 480 | 850 |

I YEAR II SEMESTER

| S. No. | Course | Course Title | Hours per Week | | - | Credits | Maximum Marks | | |
|--------|----------------|--|----------------|-------|----|---------|-------------------|----------------|-------|
| S. NO. | Code | Course Title | L | L T P | | Credits | Internal (CIE) | External (SEE) | Total |
| 1 | MA201BS | Ordinary Differential Equations and Vector Calculus | 3 | 1 | 0 | 4 | 40 | 60 | 100 |
| 2 | AP202BS | Applied Physics | 3 | 1 | 0 | 4 | 40 | 60 | 100 |
| 3 | ME207ES | Engineering Workshop | 0 | 1 | 3 | 2.5 | 40 | 60 | 100 |
| 4 | EN204HS | English for Skill Enhancement | 2 | 0 | 0 | 2 | 40 | 60 | 100 |
| 5 | EC203ES | Electronic Devices and Circuits | 2 | 0 | 0 | 2 | 40 | 60 | 100 |
| 6 | CS205ES | Python Programming Laboratory | 0 | 1 | 2 | 2 | 40 | 60 | 100 |
| 7 | AP203BS | Applied Physics Laboratory | 0 | 0 | 3 | 1.5 | 40 | 60 | 100 |
| 8 | EN205HS | English Language and Communication Skills Laboratory | 0 | 0 | 2 | 1 | 40 | 60 | 100 |
| 9 | CS206ES | IT Workshop | 0 | 0 | 2 | 1 | 40 | 60 | 100 |
| | | Total | 10 | 4 | 12 | 20 | 360 | 540 | 900 |
| Mandat | ory Course (No | on – Credit) | | | | | | | |
| 10 | *CH209MC | Environmental Science | 3 | 0 | 0 | 0 | 100 | - | 100 |

II YEAR I SEMESTER

| S. | Course | Course Title | | ours per Week | | Cuadita | Maximum Marks | | |
|-------|------------------|--|----|------------------|---|---------|-------------------|----------------|-------|
| No. | Code | Course Title | L | Т | P | Credits | Internal (CIE) | External (SEE) | Total |
| 1 | EC311PC | Digital Electronics | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 2 | CS301PC | Data Structures | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 3 | MA302BS | Computer Oriented Statistical Methods | 3 | 1 | 0 | 4 | 40 | 60 | 100 |
| 4 | CS304PC | Computer Organization and Architecture | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 5 | CS303PC | Object Oriented Programming through Java | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 6 | CS307PC | Data Structures Lab | 0 | 0 | 3 | 1.5 | 40 | 60 | 100 |
| 7 | CS308PC | Object Oriented Programming through Java Lab | 0 | 0 | 3 | 1.5 | 40 | 60 | 100 |
| 8 | CS310PC | Data visualization- R Programming/ Power BI | 0 | 0 | 2 | 1 | 40 | 60 | 100 |
| | | Total | 15 | 1 | 8 | 20 | 320 | 480 | 800 |
| Manda | atory Course (No | on – Credit) | | | | | | | |
| 9 | *GS309MC | Gender Sensitization Lab | 0 | 0 | 2 | 0 | 100 | - | 100 |

II YEAR II SEMESTER

| | Course | Course Title | | Hours per Week | | Cuadita | Maximum Marks | | |
|--------|---------------|---|----|-------------------|----|---------|-------------------|----------------|-------|
| S. No. | Code | Course Title | L | Т | P | Credits | Internal (CIE) | External (SEE) | Total |
| 1 | CS401PC | Discrete Mathematics | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 2 | BE404MS | Business Economics & Financial Analysis | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 3 | CS402PC | Operating Systems | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 4 | CS405PC | Database Management Systems | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 5 | CS403PC | Software Engineering | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 6 | CS406PC | Operating Systems Lab | 0 | 0 | 2 | 1 | 40 | 60 | 100 |
| 7 | CS407PC | Database Management Systems Lab | 0 | 0 | 2 | 1 | 40 | 60 | 100 |
| 8 | CS410PC | Real-time Research Project/ Societal Related Project | 0 | 0 | 4 | 2 | 50 | 1 | 50 |
| 9 | CS411PC | Node JS/ React JS/ Django | 0 | 0 | 2 | 1 | 40 | 60 | 100 |
| | | Total | 15 | 0 | 10 | 20 | 370 | 480 | 850 |
| Mandat | ory Course (N | on – Credit) | | | | | | | |
| 10 | *CI409MC | Constitution of India | 3 | 0 | 0 | 0 | 100 | - | 100 |

 $^{{\}bf *MC-Satisfactory/Unsatisfactory}$

2. The following SMEC R22 Course Structure of B.Tech for III-I, III-II, IV-I and IV-II were presented, discussed and approved. The total credits for the programme were discussed, finalized and approved.

III YEAR I SEMESTER

| C No | Course Title | | urs Wee | _ | - Credits - | Maximum Marks | | | | |
|--------|--|----|------------|----------------|----------------|---------------|-----|-----|--|--|
| S. No. | L T P | | Credits | Internal (CIE) | External (SEE) | Total | | | | |
| 1 | Design and Analysis of Algorithms | 3 | 1 | 0 | 4 | 40 | 60 | 100 | | |
| 2 | Computer Networks | 3 | 0 | 0 | 3 | 40 | 60 | 100 | | |
| 3 | DevOps | 3 | 0 | 0 | 3 | 40 | 60 | 100 | | |
| 4 | Professional Elective-I | 3 | 0 | 0 | 3 | 40 | 60 | 100 | | |
| 5 | Professional Elective -II | 3 | 0 | 0 | 3 | 40 | 60 | 100 | | |
| 6 | Computer Networks Lab | 0 | 0 | 2 | 1 | 40 | 60 | 100 | | |
| 7 | DevOps Lab | 0 | 0 | 2 | 1 | 40 | 60 | 100 | | |
| 8 | Advanced English Communication Skills Lab | 0 | 0 | 2 | 1 | 40 | 60 | 100 | | |
| 9 | UI design- Flutter | 0 | 0 | 2 | 1 | 40 | 60 | 100 | | |
| | Total | 15 | 1 | 8 | 20 | 360 | 540 | 900 | | |
| Mandat | Mandatory Course (Non – Credit) | | | | | | | | | |
| 10 | Intellectual Property Rights | 3 | 0 | 0 | 0 | 100 | - | 100 | | |

III YEAR II SEMESTER

| C. N. | Course Title | | urs Wee | _ | Con dita | Max | <mark>ximum Mark</mark> | S |
|--------|--|----|------------|----|----------|-------------------|-------------------------|-------|
| S. No. | Course Title | L | Т | P | Credits | Internal (CIE) | External (SEE) | Total |
| 1 | Machine Learning | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 2 | Formal Languages and Automata Theory | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 3 | Artificial Intelligence | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 4 | Professional Elective – III | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 5 | Open Elective-I | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 6 | Machine Learning Lab | 0 | 0 | 2 | 1 | 40 | 60 | 100 |
| 7 | Artificial Intelligence Lab | 0 | 0 | 2 | 1 | 40 | 60 | 100 |
| 8 | Professional Elective-III Lab | 0 | 0 | 2 | 1 | 40 | 60 | 100 |
| 9 | Industrial Oriented Mini Project/ Internship/ Skill Development Course (Big data-Spark) | 0 | 0 | 4 | 2 | 1 | 100 | 100 |
| | Total | 15 | 0 | 10 | 20 | 320 | 580 | 900 |
| Mandat | ory Course (Non – Credit) | | | | | | | |
| 10 | Environmental Science | 3 | 0 | 0 | 0 | 100 | - | 100 |

Environmental Science in III Yr II Sem Should be Registered by Lateral Entry Students Only.

IV YEAR I SEMESTER

| S. No. | Course Title | Hours per Week | | | Credits | Maximum Marks | | |
|--------|--|-------------------|---|----|---------|-------------------|----------------|-------|
| S. No. | | L | T | P | Credits | Internal (CIE) | External (SEE) | Total |
| 1 | Cryptography and Network Security | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 2 | Compiler Design | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 3 | Professional Elective -IV | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 4 | Professional Elective -V | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 5 | Open Elective - II | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 6 | Cryptography and Network Security Lab | 0 | 0 | 2 | 1 | 40 | 60 | 100 |
| 7 | Compiler Design Lab | 0 | 0 | 2 | 1 | 40 | 60 | 100 |
| 8 | Project Stage - I | 0 | 0 | 6 | 3 | - | - | - |
| | Total | 15 | 0 | 10 | 20 | 280 | 420 | 700 |

IV YEAR II SEMESTER

| C No | S. No. Course Title | | urs j Weel | _ | Credits | Maximum Marks | | | |
|--------|--------------------------------------|---|---------------|----|---------|----------------|----------------|-------|--|
| S. NO. | | | T | P | | Internal (CIE) | External (SEE) | Total | |
| 1 | Organizational Behaviour | 3 | 0 | 0 | 3 | 40 | 60 | 100 | |
| 2 | Professional Elective – VI | 3 | 0 | 0 | 3 | 40 | 60 | 100 | |
| 3 | Open Elective – III | 3 | 0 | 0 | 3 | 40 | 60 | 100 | |
| 4 | Project Stage – II including Seminar | 0 | 0 | 22 | 11 | 40 | 60 | 100 | |
| | Total | | | | | 160 | 240 | 400 | |

#Skill Course - 1 credit with 2 Practical Hours

| Professional Elective-I | Professional Elective - II |
|---------------------------------------|-------------------------------|
| Quantum Computing | Computer Graphics |
| Advanced Computer Architecture | Embedded Systems |
| Data Analytics | Information Retrieval Systems |
| Image Processing | Distributed Databases |
| Principles of Programming Languages | Natural Language Processing |
| Professional Elective - III | Professional Elective -IV |
| Full Stack Development | Graph Theory |
| Internet of Things | Advanced Operating Systems |
| Scripting Languages | Soft Computing |
| Mobile Application Development | Cloud Computing |
| Software Testing Methodologies | Ad hoc & Sensor Networks |
| Professional Elective - V | Professional Elective – VI |
| Advanced Algorithms | Computational Complexity |
| Agile Methodology | Distributed Systems |
| Robotic Process Automation | Deep Learning |
| Blockchain Technology | Human Computer Interaction |
| Software Process & Project Management | Cyber Forensics |

^{*} Courses in PE - III and PE - III Lab must be in 1-1 correspondence.

| Open Elective -I | Open Elective -II | Open Elective -III |
|-----------------------------|----------------------|-----------------------------------|
| Data Structures | Operating Systems | Algorithms Design and Analysis |
| Database Management Systems | Software Engineering | Introduction to Computer Networks |

The following points were suggested in the BOS meeting:

As a suggestion from the educationalists, they informed to Include Subject Wise Case Study

The meeting ended with chairman thanking members for their lively and useful interaction to evolve a best possible course structure and syllabus for the B. Tech Computer Science and Engineering programme.





Copy to:

1. Principal

2. IQAC

Chairman Rs May

Dr. R. Santhoshkumar

HOD-CSE