

# PAAVAI ENGINEERING COLLEGE

(Autonomous)

## DEPARTMENT OF AERONAUTICAL ENGINEERING

### Minutes of 11<sup>th</sup> Board of Studies Meeting

(Online Mode)

Date and Time: 20.12.2024, 1.30 p.m.

The 11<sup>th</sup> Board of studies meeting of the Aeronautical Engineering Department was held on 20.12.2024 (Friday), at 1.30 pm through online mode (Microsoft Teams). The following members were present for the meeting.

S.No	Name	Designation	Position in the Committee	College / University / Industry
1.	Dr.R.Arravind	HoD/ Aero	Chairman	Paavai Engineering College, Namakkal.
2.	Dr.A.Saravanakumar	Assistant Professor (Sr.Gr.)/ Aerospace	University Nominee	MIT Campus, Chennai
3.	Dr.C.Ramesh,	Associate Professor/Aero	Academic Expert	Hindustan Institute of Technology and Science, Chennai
4.	Dr.T.Selvakumaran	Associate Professor/ Aero	Academic Expert	SRM Institute of Science & Technology, Chennai
5.	Mr.S.Gopinathan	Founder & Director	Industry Expert	Dileka Aerospace & Innovations, Nilgiris.
6.	Ms.C.Dhivya	Part Applicability Specialist Organization	Alumni	Boeing India Pvt Ltd, Chennai
7.	Dr.K.Selvi	Dean Academics	Special Invitee	Paavai Engineering College
8.	Dr.D.Deepak	ASP/Aero	Members	Paavai Engineering College
9.	Mr.S.Suthagar	AP/Aero		
10.	Mr.D.Rajkumar	AP/Aero		
11.	Mr.G.Sasi	AP/Aero		
12.	Mr.K.Gokulnath	AP/Aero		
13.	Mr.P.Prasanna	AP/Aero		



### Agenda

- Welcome address by the Chairman – BoS, Aeronautical Engineering
- Vision and mission of Institution and Department.
- PEOs, POs and PSOs of UG Programme.
- Confirmation of the minutes of the 10<sup>th</sup> Board of studies meeting held on 03.05.2024 and action taken report.
- To consider & approve the Curriculum and Syllabus of 4th semester and Professional Electives (Verticals I, II and III) of B.E. Aeronautical Engineering Programme under Regulations 2023.
  - Curriculum, Credits and its structure
  - Syllabus
  - List of Professional Electives (Verticals I, II and III)
- To discuss and approval for NPTEL Course & Professional Elective Exemption.
- To discuss and approval for fast-track mode for eligible students.
- To discuss and approval for Assessment Weightage.
- Any other items.

**BoS / AERO 11.1** : The Board of studies Chairman welcomed the members.

**BoS / AERO 11.2** : Vision and Mission of Institution and Department were described  
PEOs, POs and PSOs of UG and PG Programme were described.

**BoS/AERO 11.3** :  
**APPROVED THE SAME.**

**BoS/AERO 11.4** :  
**APPROVED THE SAME.**

The minutes of the 10th Board of Studies meeting held on 03.05.2024 were communicated to the members. The comments received have been incorporated and placed for confirmation. The same was approved by the committee members.





**BoS/AERO 11.5** : To consider and approve the curriculum structure, curriculum, syllabi, and course outcomes of the 4th semester and professional electives, including new courses (Verticals 1, 2, and 3), under R2023 of the B.E. Aeronautical Engineering (CBCS) programme, to be offered with effect from the academic year 2025-2026 onwards.

➤ **Suggestions given by the members regarding UG syllabus and Verticals:**

### **VERTICAL I**

#### **1. AE23151– Aircraft Materials**

- Add an introduction to materials in Unit I.
- Suggested adding the latest editions of textbooks.

#### **2. AE23152- Vibration and Aero elasticity**

- Suggested textbooks include William T. Thomson and Aeroelasticity by Y.C. Fung.

#### **3. AE23153- Fatigue and Fracture Mechanics**

- Need to change the title of Unit II to Study of Fatigue Behaviour.
- Check whether Unit V is a continuation of Unit IV

#### **4. AE23156-Vibration and Isolation Control**

- Elaborate the Unit V .

### **VERTICAL II**

#### **1. AE23252- Boundary Layer Theory**

- In unit II check the content of in viscous Flow.
- Suggested to verify the repetitions Unit V.

#### **2. AE23252- Computational Fluid Dynamics**

- Suggested to add the future of CFD in Industrial applications.

#### **3. AE23254- Experimental Aerodynamics**

- Change the title as Pressure Measurement in unit IV.
- Unit V as Temperature and velocity measurements.
- Add Introduction to temperature in Unit V.

### **VERTICAL III**

#### **AE23353- Computational Fluid Dynamics and Heat Transfer**



- Include case study or numerical problems.

1. **AE23354- Theory of Flames**

- Need to elaborate the content.

2. **AE23356- Advanced Propulsion System**

- Change the Unit I title as Fundamental concepts
- Change the content in the Unit V.

3. **AE23357- Electric Propulsion Systems**

- Need to elaborate the content.

**GENERAL SUGGESTIONS:**

- In vertical VII title need to change the title as "Space Technology".

**RESOLVED AND APPROVED THE SAME.**



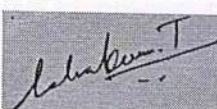
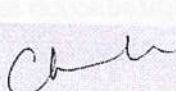
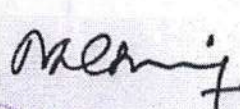
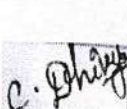
**BoS/AERO 11.6** : Discussed and got approval for Curriculum Structure, Syllabi & Course Outcomes of 4<sup>th</sup> semester and Professional Electives (Verticals I, II and III).

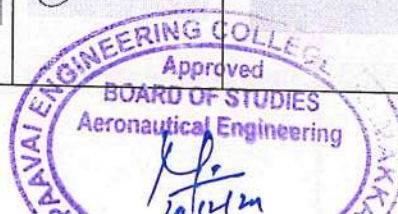
**BoS/AERO 11.7** : Discussed and got approval for Transfer of Credits for NPTEL Courses.

**BoS/AERO 11.8** : Discussed and got approval for fast-track mode for eligible students.

**BoS/AERO 11.9** : Discussed and got approval for Assessment Weightage.

The above suggestions were given by the members and approved the Curriculum Structure, Syllabi & Course Outcomes of 4<sup>th</sup> semester and Professional Electives (Verticals I, II and III) for UG under R2023 for the students admitted in the year 2023-2024 and NPTEL Course & Professional Elective Exemption and panel of examiners.

Position in the committee	Chairman	University Nominee	Academic Expert	Academic Expert	Industry Expert	Alumni
Name & Designation	Dr.R.Arravind	Dr.A.Saravanakumar	Dr.Selvakumaran.T	Dr.C.Ramesh,	Mr.S.Gopinathan	Ms.Dhivya.C
Signature						





**PAAVAI ENGINEERING COLLEGE**

**(Autonomous)**

**DEPARTMENT OF BIOMEDICAL ENGINEERING**

**Minutes of 8<sup>th</sup> Board of Studies Meeting**

**Venue: Placement Hall**

**Date and Time: 23.12.2024, 10.00 a.m.**

The 8<sup>th</sup> Board of studies meeting of the Biomedical Engineering Department was held on 23.12.2024 (Monday), at 10.00 am in Placement Hall, Temple Tower Building, Paavai Engineering College, Pachal. The following members were present for the meeting.

S.No	Name	Designation	Position in the Committee	College / University / Industry
1.	Dr.T.Arunkumar	Professor and Head of the Department	Chairman	Paavai Engineering college
2.	Dr. T. Jayasree	Associate Professor	University Nominee	Dept of Medical Electronics Engineering
3.	Dr. K. Vijayalakshmi	Professor	Academic Expert-1	Dept of Medical Electronics Engineering; BMS college of Engineering, Bangalore
4.	Dr. D.K. Ravish	Associate Professor and Head of the Department	Academic Expert-2	Department of Medical Electronics Engineering Dr.Ambedkar Institute of Technology, Bangalore, India
5.	Mr. S. Kumar	General Manager	Industry Expert	TMI Systems, Bangalore
6.	Ms. Kaushika Nachimuthu	Service Engineer	Alumni	BioGen, angalore.
7.	Mr.D.Murugesan	ASP/BME	<b>Members</b> <b>Paavai Engineering College</b>	
8.	Dr.S.Rajasekaran	ASP/ BME		
9.	Dr.N.Jayanthi	ASP/ BME		
10.	Mr.S.Jotheeswaran	AP/ BME		
11.	Mrs.B.Niranjana Devi	AP/ BME		
12.	Mrs.M.Abinaya	AP/ BME		
13.	Mrs.S.Sugnya	AP/ BME		
14.	Ms.V.Ramya	AP/ BME		
15.	Mrs.S.Praveena	AP/ BME		



## AGENDA

- The Chairman, Board of Studies welcomed the members.
- Confirmation of the minutes of the 7<sup>th</sup> Board of studies meeting held on 08.05.2024 and action taken report.
- Presentation of Curriculum and Syllabus of Verticals I,II and IIIB.E. Biomedical Engineering Programme under Regulations 2023.
  - Curriculum
  - Syllabus
  - List of Professional Electives
  - List of Open Electives
  - List of Mandatory courses
  - Programme Credit details
- To consider & approve the Curriculum structure & Syllabi of verticals I,II and III semesters (CBCS) to be offered under Regulations 2023.
- Any other items.

**BoS / BME 10.1** : The Board of studies Chairman welcomed the members.

**BoS / BME 10.2** : The minutes of the 7<sup>th</sup> Board of Studies meeting held on 08.05.2024 were communicated to the members. The comments received have been incorporated and placed for confirmation. The same was approved by the committee members.

**BoS/ BME 10.3** : To consider & approve the Curriculum, Curriculum Structure & Syllabi of verticals I,II and III for B.E. – Biomedical Engineering programme(CBCS) to be offered under R-2023 with effect from the Academic Year 2023-2024 onwards.

➤ **Suggestions given by the members regarding :**

➤ **VERTICAL I:**

➤ **BM23152- Neural engineering**

- Unit 2 title must be changed, case studies must be included in unit 3 and 5 such as Parkinsons disease and neuro plasticity.

➤ **BM23153- Biophotonics**





- In unit 1, characteristics of laser, production of laser, co2 laser, NDYAG laser can be included.
  - In unit 2, interaction of laser/light with tissue can be included.
  - In unit 3, devices in laser like fluorometry, Fluro cytometry, fluorescence, film, FTIR can be included.
  - In unit 5, laser application like ophthalmology, neurology, laser in dentistry, micro laser in radiation, advanced equipment in photonics.
- **BM23154- Nanotechnology in medicine**
- Confocal microscopy, SEM, TEM topics must be included.
- **BM23155- Advances in drug delivery:**
- In unit 5 content must be reframed.

#### **VERTICAL II:**

- **BM23251: Medical device and design**
- Unit 1 title must be given as Introduction.
  - In unit 3 the topic with specific contents and can be elaborated.
  - In unit 4, testing tools, validation tools, troubleshooting, random testing, 6 essentials of software testing topics can be included.
  - In unit 5, trademarks title can be removed and case studies based on IPR procedure can be included.
- **BM23253- Patient safety, ethics and standards.**
- Bioethics, devices and regulation topics can be included.

#### **VERTICAL III:**

- **BM23355- Biomedical waste management:**
- Topics based on sterilization, crimination, pollution control acts, case studies can be included.
- **Clinic engineering** course can be removed.
- **Economics for healthcare management** must be removed.

#### **GENERAL SUGGESTIONS:**

- Human assist device can be included in professional elective.
- Radiological equipment can be included in 6<sup>th</sup> semester, biomaterials in 5<sup>th</sup> semester and medical image processing and biomechanics in 7<sup>th</sup> semester.
- In Biosignal processing discrete fourier transform can be included.
- Medical ethics and standards must be included in professional core.
- Pathology and microbiology can be replaced in vertical I



- Bone remodeling can be removed from vertical III and replaced in biomechanics vertical.
- Medical imaging must be removed from minors and robotics in medicine can be added.
- Bioinformatics can be replaced medical informatics in minors.
- Basics of biomedical equipment must be added in minors.
- Assistive technology can be included
- Biology for Engineers' course can be added in minors.
- Robotics and mechanics in medical field must be added in biomechanics.
- Vertical 4 title must be changed.
- Vertical 7 data mining and pattern recognition can be changed as PRNN.
- AOI can be renamed as bioimplants and include soft tissues and hard tissue implants.


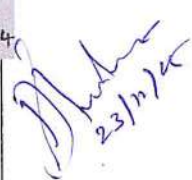
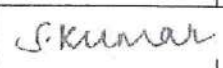

**RESOLVED AND APPROVED THE SAME.**





**BoS/BME10.4: To consider & Approve the Curriculum Structure& Syllabi of verticals I, II and III (CBCS) to be offered under R-2023.**

The above suggestions were given by the members and approved the syllabi for verticals I, II and III under R2023 for the students admitted in the year 2024-2025and curriculum structure.

Position in the committee	Chairman	University Nominee	Academic Expert	Academic Expert	Industry Expert	Alumni
Name & Designation	Dr.T.Arunkumar Professor and Head of the Department- BME	Dr.T.Jayasree Associate Professor Dept of Medical Electronics Engineering	Dr.K. Vijayalakshmi Professor Dept of Medical Electronics Engineering; BMS college of Engineering, Bangalore	Dr.D.K.Ravish Department of Medical Electronics Engineering Dr.Ambedkar Institute of Technology, Bangalore	Mr. S. Kumar General Manager TMI Systems, Bangalore	Ms. Kaushik Nachimuthu Service Engineer BioGen, Bangalore.
Signature	 23.12.24	 23/12/25	 22/12/24	 23/12/24		



# PAAVAI ENGINEERING COLLEGE

(Autonomous)

## DEPARTMENT OF CIVIL ENGINEERING

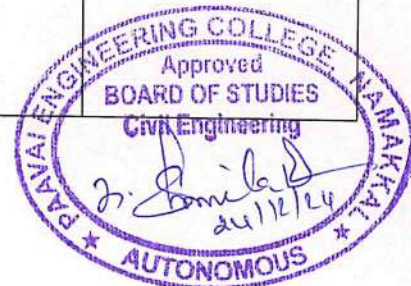
### Minutes of 11<sup>th</sup> Board of Studies Meeting

Venue: Placement Hall

Date and Time: 24.12.2024, 10.00 a.m.

The 11<sup>th</sup> Board of studies meeting of the Civil Engineering Department was held on 24.12.2024 (Tuesday), at 10.00 am (Hybrid Mode) in Placement Hall, Temple Tower Building, Paavai Engineering College, Pachal. The following members were present for the meeting.

S.No	Name	Designation	Position in the Committee	College / University / Industry
1.	Prof.K.Sharmiladevi	HoD/ Civil	Chairman	Paavai Engineering College, Namakkal.
2.	Dr.S.Sundari	Associate Professor/Civil	University Nominee	Government College of Engineering, Salem.
3.	Dr.V.Senthilkumar	Assistant Professor/Civil	Academic Expert	National Institute of Technology , Puduchery, Karaikal
4.	Dr.R.Prasanna Venkatesan	Associate Professor / School of Civil Engineering	Academic Expert	VIT University, Vellore
5.	Er.N.Chandrasekaran.M.E (Ph.D),	Senior Structural Consultant	Industry Expert	NAC Consultant, Tiruppur
6.	Er.Visanth Renu, M.S.,	Assistant Engineer (BIM)	Alumni	Arcadis, Bangalore
7.	Dr.K.Selvi	Dean Academics	Special Invitee	Paavai Engineering College
8.	Mr. A. Jayapal	AP/Civil	Members	Paavai Engineering College
9.	Mr.P.Vignesh	AP/Civil		
10.	Mr.N.Moorthi	AP/Civil		
11.	Mr.M.Rajkannan	AP/Civil		
12.	Mrs.S.Rajeswari	AP/Civil		
13.	Mrs.B.Karthiga	AP/Civil		





## Agenda

- **Welcome Address**
- **Vision and mission of Institution and Department.**
- **PEOs, POs and PSOs of UG and PG Programmes.**
- **Confirmation of the minutes of the 10<sup>th</sup> Board of studies meeting held on 03.05.2024 and action taken report.**
- **To consider & approve the Curriculum and Syllabus of 4<sup>th</sup> semester and Verticals I, II and III of B.E Civil Engineering Programme under Regulations 2023.**
  - Curriculum, Credits and its structure
  - Syllabus of Verticals I, II and III.
  - List of Professional Electives
  - List of Verticals
  - List of Open Electives
  - List of Value added courses
  - List of Mandatory courses
- **To discuss B.E/B.Tech (Minor in other Specialization)**
- **To discuss and approve Transfer of Credits for NPTEL courses.**
- **To discuss and approve Assessment Weightage.**

### **Minutes of the BoS Meeting**

**BoS / CIVIL 10.1** : The Board of studies Chairman welcomed the members.

**BoS / CIVIL 10.2** : Vision and mission of Institution and Department were described.

**APPROVED THE SAME.**

**BoS / CIVIL 10.3** : PEOs, POs and PSOs of UG Programmes were described.

**APPROVED THE SAME.**

**BoS / CIVIL 10.4** : The minutes of the 10<sup>th</sup> Board of Studies meeting held on 03.05.2024 were communicated to the members. The comments received have been incorporated and placed for confirmation.



The same was approved by the committee members.

**APPROVED THE SAME.**

- BoS / CIVIL 10.5** : To consider & approve the Curriculum, Curriculum Structure, Syllabi & Course Outcomes of IV semesters and Verticals I, II and III for B.E Civil Engineering Programme (CBCS) to be offered under Regulations 2023 with effect from the Academic Year 2023-2024 onwards.

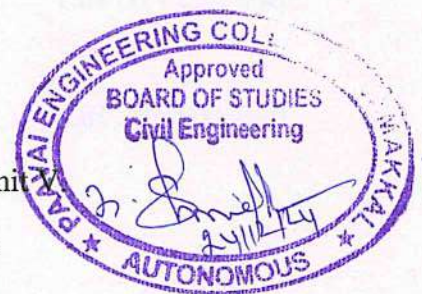
**Suggestions given by the members regarding UG syllabus:**

**Vertical – I (Structural Engineering)**

1. **CE23152- Dynamics and Earthquake Resistant Structures**
  - This course can be separated into two courses and named as structural dynamics and Earthquake Resistant Structures.
  - The topic dampers, damping techniques can be included in Unit V.
  - Include the IS codal provisions in references.
2. **CE23153 - Introduction to Finite Element Method**
  - Course name shall be changed as Finite Element Method instead of Introduction to Finite Element Method.
  - The course content shall be increased and added in Unit II.
3. **CE23154 - Steel Concrete Composite Structures**
  - Design concepts shall be included in the syllabus.
4. **CE23157 - Advanced Structural Analysis**
  - The course shall be removed from the vertical and instead of that Industrial Structures course can be included.

**Vertical – II (Construction Techniques and Management)**

1. **CE23251 - Formwork Engineering**
  - Shoring and Scaffolding topics shall be included in Unit V.
  - Unit III and Unit V shall be clubbed into a single unit.
2. **CE23252 – Building Lighting and Ventilation Engineering**
  - The course can be moved to under Vertical- VII Modern Structures and Maintenance.
  - This course can be replaced by Energy Efficient Building or Green Building.
3. **CE23253 – Lean Construction**
  - Unit V title shall be changed as Lean implementation.





- Case studies can be included in Unit V.

4. **CE23257 - 3D Printing in Construction**

- The course shall be moved to Vertical – VII.
- The courses Tendering and Contract, Construction Quality Management can be included under vertical –II Construction Techniques and Management.

**Vertical – III (Geotechnical Engineering)**

1. **CE23351 - Geology and Rock Engineering**

- Geology for Civil Engineers – P.C.Varghese can be included as a text book.

2. **CE23352 - Ground Improvement Techniques**

- The topic, Classifications of Ground Improvement Techniques shall be included in Unit I.
- The title of Unit II can be renamed as Hydraulic Method.
- The title of Unit III shall be renamed as Mechanical Method.
- The topics, Ground anchors, Soil Nailing and micro piles shall be included in Unit IV.
- The topic, modifications using admixtures shall be included in Unit V.
- Principles and practice of Ground Improvement by J.Han can be included in Reference books.

3. **CE23353 - Soil Dynamics and Machine Foundations**

- Unit II “Wave Propagation and Dynamic Soil Properties” shall be split into Two units.
- Unit III shall be removed.
- Can include the text book - Soil Dynamics and Machine Foundations by Swami saran

4. **CE23354 - Reinforced Earth and Geotextiles**

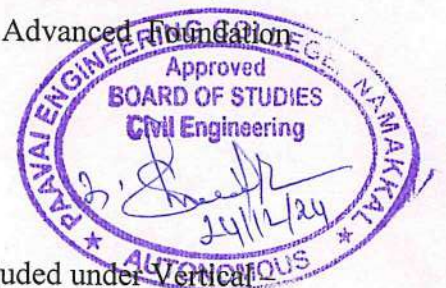
- The course title shall be renamed as Geosynthetics and Reinforced Soil Structures.

5. **CE23355 - Deep Foundation & CE23356 - Earth Retaining Structures**

- Both courses shall be combined and renamed as Advanced Foundation Engineering.

6. **CE23357 - Tunneling Engineering**

- This course can be removed from the Vertical III.
- Soil Exploration and Investigation course can be included under Vertical



**RESOLVED AND APPROVED THE SAME.**

**BoS / CIVIL 10.6 : Discussed and got approval for B.E/B.Tech (Minor in other Specialization)**

**BoS / CIVIL 10.7 : Discussed and got approval for Transfer of Credits for NPTEL Courses.**

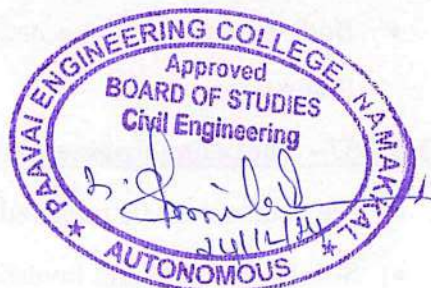
Our Third year students 4 members have completed Municipal Solid Waste Management Course from NPTEL (Jul – Oct 2024). Instead of this, we need course exemption from professional elective III in VI<sup>th</sup> Semester

S.No	Register No	Students Name
1	622122103003	Balaji.P
2	622122103004	Dhanush.M
3	622122103021	Sharma.J.M
4	622122103024	Vaishnavi.N

Our Final year students 11 members have completed Air Pollution and Control Course from NPTEL (Jan – April 2024). Instead of this, we need course exemption from professional elective V in VIII<sup>th</sup> Semester.

S.No	Register No	Students Name
1	622121103001	Akalya.T
2	622121103003	Aswin.P
3	622121103012	Kowshika K.E
4	622121103014	Muthaiya Muralitharan.T
5	622121103015	Neethu.G
6	622121103016	Pandiyarajan M
7	622121103024	Siva.S
8	622121103025	Sudha.M
9	622121103028	Vishwa.K
10	622121103030	Keerthana.R
11	622121103301	Kalaivendhan.M

**BoS / CIVIL 10.8 : Discussed and got approval for Assessment Weightage.**





The above suggestions were given by the members and approved the Curriculum of R2023 and syllabus of 4<sup>th</sup> semester, Verticals I, II and III, Value added course, Minor degree Course, and panel of examiners.

Position in the committee	Chairman	University Nominee	Academic Expert	Academic Expert	Industry Expert	Alumni
Name & Designation	Prof.K.Sharmiladevi HoD/Civil	Dr.S.Sundari Associate Professor/ Civil Engineering, Government College of Engineering, Salem.	Dr.V.Senthilkumar Assistant Professor/Civil, NIT Karaikal.	Dr.R.Prasanna Venkatesan Associate Professor / School of Civil Engineering, VIT Vellore	Er.N.Chandrasekaran Senior Structural Consultant NAC Consultant, Tirupur.	Er.Visanth Renu, Assistant Engineer (BIM), Arcadis, Bangalore
Signature	 24/12/24	 24/12/24	 V. Senthilkumar	 Dr. R. Prasanna Venkatesan	 Er. N. Chandrasekaran	 Er. Visanth Renu



**PAAVAI ENGINEERING COLLEGE**  
(AUTONOMOUS)  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**Minutes of 11<sup>th</sup> Board of Studies Meeting**

**Date and Time: 27.12.2024, 02.00 p.m.**

The 11<sup>th</sup> Board of studies meeting of the Department of Computer Science and Engineering was held on 27.12.2024 (Friday), at 02.00 pm, Paavai Engineering College, Pachal. The following members were present in the meeting.

S.No	Name	Designation	Position in the Committee	College / University / Industry
1.	Dr.D.Banumathy	Professor & Head/CSE	Chairman	Paavai Engineering College
2.	Dr.D.Indumathi	Associate Professor/CSE	University Nominee	PSG College of Technology, Coimbatore.
3.	Dr.R.Mohan	Associate Professor/CSE	Academic Expert	NIT, Trichy.
4.	Dr.P.Suresh	Associate Professor/CSE	Academic Expert	VIT, Vellore.
5.	Mr.D.Nanthagopal	Technical Lead	Industry Expert	Bosch Global software and technology pvt limited, Coimbatore.
6.	Mr.M.Sivakumar	Associate Engineer	Alumni	J.P Morgan chase and Co.Lmt,Bengaluru.
7.	Dr.K.Selvi	Dean-Academics	Members	Paavai Engineering College
8.	Dr.V.Priya	Professor, CSE		Paavai Engineering College
9.	Mr.M.Siva Ganesh	Associate Professor, CSE		Paavai Engineering College
10.	Mr.N.M.K.Ramalingam sakthivelan	Associate Professor, CSE		Paavai Engineering College
11.	Mrs.K.Sudhadevi	Associate Professor, CSE		Paavai Engineering College
12.	Dr.P.Thiyagarajan	Associate Professor, CSE		Paavai Engineering College
13.	Dr.A.Jeyamurugan	Assistant Professor, CSE		Paavai Engineering College
14.	Mr.V.Maheshkumar	Assistant Professor, CSE		Paavai Engineering College
15.	Dr.V.Ravindra Kishna Chandar	Assistant Professor, CSE		Paavai Engineering College



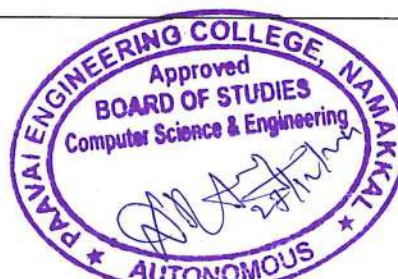
## Agenda

➤	Welcome Address
➤	Vision and mission of Institution and Department.
➤	PEOs, POs and PSOs of UG and PG Programmes.
➤	Confirmation of the minutes of the 11 <sup>th</sup> Board of studies meeting held on 10.12.2024 and action taken report.
➤	<b>Framing of Curriculum and Syllabus</b> <ul style="list-style-type: none"> <li>Feedback from Stakeholders</li> <li>Syllabus Review Committee (SRC) – 21.12.2024</li> <li>Department Advisory Committee (DAC) – 24.12.2024</li> </ul>
➤	<b>To consider &amp; approve the Curriculum and Syllabus of 4<sup>th</sup> semester and Professional Electives (Vertical Subjects 1,2 and 3 ) of B.E Computer Science and Engineering Programme under Regulations 2023.</b> <ul style="list-style-type: none"> <li>Curriculum, Credits and its structure</li> <li>Syllabus</li> <li>List of Professional Electives</li> <li>List of Open Electives</li> <li>List of One Credit Courses</li> <li>List of Value added courses</li> <li>List of Mandatory courses</li> </ul>
➤	To discuss about Design thinking courses.
➤	To discuss and approve Transfer of Credits.
➤	To discuss and approve re-admitted students for additional course.
➤	To discuss and approve fast track mode for eligible students.
➤	To discuss and approve Assessment Weightage.
➤	Any other items relevant to the board of studies.



## Minutes of the BoS Meeting

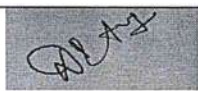
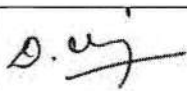

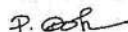


BoS / CSE 10.1	:	The Board of studies Chairman welcomed the members.
BoS / CSE 10.2	:	Vision and mission of Institution and Department were described.
APPROVED THE SAME.		
BoS / CSE 10.3	:	PEOs, POs and PSOs of UG and PG Programme were described.
APPROVED THE SAME.		
BoS / CSE 10.4	:	The minutes of the 11 <sup>th</sup> Board of Studies meeting held on 10.12.2024 were communicated to the members. The comments received have been incorporated and placed for confirmation.
APPROVED THE SAME.		
BoS / CSE 10.5	:	To consider & approved the Curriculum and Syllabus of 4 <sup>th</sup> semester and Professional Electives (Vertical Subjects 1,2 and 3 ) of B.E Computer Science and Engineering Programmes under Regulations 2023.
Suggestions given by the members regarding UG syllabus:		
<u>VERTICAL-I DATA SCIENCE</u>		
1.	<u>Exploratory Data Analysis</u>	
	<ul style="list-style-type: none"><li>The Committee suggested to change the topics in Unit II.</li></ul>	
2	<u>Recommender Systems</u>	
	<ul style="list-style-type: none"><li>The committee emphasized updating the textbooks to the latest editions.</li></ul>	
<u>VERTICAL-II FULL STACK DEVELOPMENT</u>		
1.	<u>App Development</u>	
	<ul style="list-style-type: none"><li>Since App Development is analytical, the committee recommended to conduct the course by tutorial and consider it as integrated course.</li></ul>	
2.	<u>Principles of Programming Languages</u>	
	<ul style="list-style-type: none"><li>Since the syllabus was too vast, the committee recommended to divide Unit 5 into two units.</li></ul>	

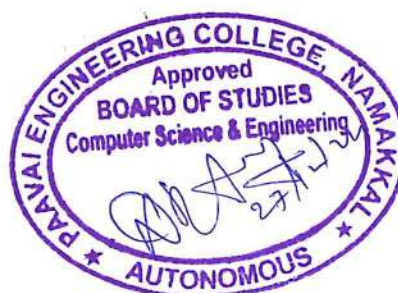




VERTICAL-III CLOUD COMPUTING AND DATA CENTER TECHNOLOGIES		
1.	<u>Data Analytics</u>	
<ul style="list-style-type: none"> <li>The committee recommended to change the topics in Unit II.</li> </ul>		
APPROVED THE SAME.		
BoS / CSE 10.6		Discussed and got approval for Design Thinking Courses.
BoS / CSE 10.7	:	Discussed and got approval for Transfer of Credits for NPTEL Courses.
BoS / CSE 10.8	:	Discussed and got approval for re-admitted students for additional course.
BoS / CSE 10.9	:	Discussed and got approval for fast track mode for eligible students.
BoS / CSE 10.10	:	Discussed and got approval for Assessment Weightage.

The above suggestions were given by the members and approved the Curriculum and Syllabus of 4<sup>th</sup> semester and Professional Electives (Vertical Subjects 1, 2 and 3) of B.E Computer Science and Engineering Programmes under Regulations 2023, one credit courses, open electives, verticals, value added courses, amendment, mandatory courses and panel of examiners.

Position in the committee	Chairman	University Nominee	Academic Expert	Academic Expert	Industry Expert	Alumni
Name & Designation	Dr.D.Banumathy Professor & Head/CSE	Dr.D.Indumathi ASP/CSE, PSG College of Technology, Coimbatore.	Dr.R.Mohan, ASP/CSE NIT, Trichy	Dr.P.Suresh, ASP/CSE. VIT, Vellore.	Mr.D.Nanthagopal, Technical Lead, Bosch Global Software and Technology Pvt. Limited, Coimbatore.	Mr.M.Sivakumar , Associate Engineer, J.P Morgan chase and Co. Lmt. Bengaluru.
Signature						



**PAAVAI ENGINEERING COLLEGE**

**(An Autonomous Institution)**

**DEPARTMENT OF B.E.CSE (Artificial Intelligence and Machine Learning)**

**Minutes of the 4<sup>th</sup> Board of Studies Meeting**

**Venue: Online**

**Date and Time: 27.12.2024, 02:00 P.M.**

The 4<sup>th</sup> Board of studies meeting of the **B.E.CSE (Artificial Intelligence and Machine Learning)** was held on 27.12.2024 at 02:00 pm, Paavai Engineering College, Pachal, Namakkal. Tamilnadu. The following members were present in the meeting.

S.No	Name	Designation	Position in the Committee	College / University / Industry
1.	Dr.P.Srinivasan	Professor & Head/ CSE(AI and ML)	Chairman	Paavai Engineering College.
2.	Dr.D.Indumathi	Associate Professor/CSE	University Nominee	PSG College of Technology, Coimbatore.
3.	Dr.R.Mohan	Associate Professor/CSE	Academic Expert1	Dept of CSE, NIT, Trichy.
4.	Dr.P.Suresh	ASP/ Dept. of Database Systems	Academic Expert2	School of Computer Science and Engineering, VIT, Vellore.
5.	Mr.D.Nanthagopal	Technical Lead	Industry Expert	Bosch Global software and technology pvt limited, Coimbatore.
6.	Mr.M.Sivakumar	Associate Engineer	Alumni	J.P Morgan chase and Co. Lmt, Bengaluru.
7.	Dr.M.Rameshkumar	Professor/CSE	Members	Paavai Engineering College, Namakkal.
8.	Dr.V.Priya	Professor/CSE		





9.	Mr.S.Sundaram	Associate Professor /CSE(AI and ML)	Members	Paavai Engineering College, Namakkal.
10.	A.Rathipriya	Assistant Professor /CSE(AI and ML)		
11.	Mrs.K.Sudhadevi	Associate Professor /CSE		
12.	Dr.P.Thiyagarajan	Associate Professor /CSE		
13.	Mrs.S.Mangaiyarkarasi	Assistant Professor/ CSE(AI and ML)		
14.	Mr.S.Vangili	Assistant Professor /CSE(AI and ML)		
15.	Mrs.R.Poonkodi	Associate Professor/CSE(AI and ML)		

### Agenda

➤	<b>Welcome Address</b>
➤	<b>Vision and mission of Institution and Department.</b>
➤	<b>PEOs, POs and PSOs of the Programme.</b>
➤	<b>Confirmation of the minutes of the 4<sup>th</sup> Board of studies meeting held on 27.12.2024 and action taken report.</b>
➤	<b>To consider &amp; approved the Curriculum and Syllabus of 4<sup>th</sup> semester and Professional Electives (Vertical Subjects 1,2 and 3 ) of B.E CSE (AI and ML) Programmes under Regulations 2023.</b>  Curriculum, Credits and its structure Syllabus List of Professional Electives Verticals List of Open Electives List of Value-added courses



	List of Mandatory courses Amendments
➤	To discuss about B.E/B.Tech (Minor in other Specialization)
➤	To discuss and approve Transfer of Credits.
➤	To discuss and approve fast track mode for eligible students.
➤	To discuss and approve Assessment Weightage.
➤	Any other items relevant to the board of studies.

### Minutes of the BoS Meeting

BoS / AI and ML 4.1	:	The Board of studies Chairman welcomed the members.
BoS / AI and ML 4.2	:	Vision and mission of Institution and Department were described.
<b>APPROVED THE SAME.</b>		
BoS / AI and ML 4.3	:	PEOs, POs and PSOs of UG Programme were described.
<b>APPROVED THE SAME.</b>		
BoS / AI and ML 4.4	:	The minutes of the 3 <sup>th</sup> Board of Studies meeting held on 18.05.2024 were communicated to the members. The comments received have been incorporated and placed for confirmation.





**APPROVED THE SAME.**

**BoS / AI and ML 4.5**

**:**

To consider & approved the Curriculum and Syllabus of 4<sup>th</sup> semester and Professional Electives (Vertical Subjects 1.2 and 3 ) of B.E CSE (AI and ML) Programmes under Regulations 2023.

Suggestions given by the members regarding UG syllabus - Regulations - 2023.

**PROFESSIONAL ELECTIVE VERTICLES – I : DATA SCIENCE**

**1.**

**BIG DATA ANALYTICS**

- The committee suggested to reduce the contents of Unit-2.
- The members suggested to reduce the number of text books.

**2.**

**DATA VISUALIZATION**

- Experts recommended to add the topic 'Data Manipulation using Panda' in either Unit-3 or Unit-4.

**PROFESSIONAL ELECTIVE VERTICLES – II : NETWORKS AND MACHINE LEARNING**

**1.**

**DRONES IN AGRICULTURE**

- Suggested to add topics on 'Production and Irrigation' in Unit-3.
- Suggested to add more reference books.

**2.**

**IOT FOR SMART CITIES**




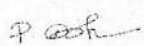




<ul style="list-style-type: none"> <li>Committee suggested to add the topic 'Safety for Smart cities' in Unit-3.</li> </ul>		
<b>PROFESSIONAL ELECTIVE VERTICLES – III : ARTIFICIAL INTELLIGENCE AND CYBER SECURITY</b>		
1.	<b><u>ETHICAL HACKING (INTEGRATED)</u></b>	
<ul style="list-style-type: none"> <li>Being an integrated course, committee recommended to reduce the lab experiments.</li> </ul>		
2.	<b><u>MALWARE ANALYSIS IN DATA SCIENCE</u></b>	
<ul style="list-style-type: none"> <li>Board members suggested to add more topics under Unit-3.</li> </ul>		
<b>RESOLVED AND APPROVED THE SAME.</b>		
<b>All above suggestions are resolved and approved the same.</b>		
BoS / AI and ML 4.6	:	Discussed and got approved about B.E/B.Tech (Minor in other Specialization)
BoS / AI and ML 4.7	:	Discussed and got approved about Transfer of Credits for NPTEL Courses.
BoS / AI and ML 4.8	:	Discussed and got approved about fast track mode for eligible students.
BoS / AI and ML 4.9	:	Discussed and got approved about Assessment Weightage.

The above suggestions were given by the members and approved the Curriculum and Syllabus of 4<sup>th</sup> semester and Professional Electives (Vertical Subjects 1, 2 and 3) of B.E CSE(AI and ML) Programmes under Regulations 2023, one credit courses, open electives, verticals, value added courses, amendment, mandatory courses and panel of examiners.





Position in the committee	Chairman	University Nominee	Academic Expert	Academic Expert	Industry Expert	Alumni
Name & Designation	Dr.P.Srinivasan Professor & Head/ CSE(AI and ML)	Dr.D.Indumathi ASP/CSE, PSG College of Technology, Coimbatore.	Dr.R.Mohan, ASP/CSE NIT, Trichy	Dr.P.Suresh, ASP/CSE. VIT, Vellore.	Mr.D.Nanthagopal, Technical Lead, Bosch Global Software and Technology Pvt. Limited, Coimbatore.	Mr.M.Sivakumar, Associate Engineer, J.P Morgan chase and Co. Lmt. Bengaluru.
Signature						





**PAAVAI ENGINEERING COLLEGE**  
(AUTONOMOUS)  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
(INTERNET OF THINGS)

**Minutes of 4<sup>th</sup> Board of Studies Meeting**

**Date and Time: 27.12.2024, 02.00 p.m.**

The 4<sup>th</sup> Board of studies meeting of the Department of CSE (IOT) was held on 27.12.2024 (Friday) through online, at 02.00 pm, Paavai Engineering College, Pachal. The following members were present in the meeting.

S.No	Name	Designation	Position in the Committee	College / University / Industry
1.	Dr.M.Rameshkumar	Professor & Head/CSE (IOT)	Chairman	Paavai Engineering College
2.	Dr.D.Indumathi	Associate Professor/CSE	University Nominee	PSG College of Technology, Coimbatore.
3.	Dr.R.Mohan	Associate Professor/CSE	Academic Expert	NIT, Trichy.
4.	Dr.P.Suresh	Associate Professor/CSE	Academic Expert	VIT, Vellore.
5.	Mr.D.Nanthagopal	Technical Lead	Industry Expert	Bosch Global software and technology pvt limited, Coimbatore.
6.	Mr.M.Sivakumar	Associate Engineer	Alumni	J.P Morgan chase and Co.Lmt,Bengaluru.
7.	Dr.K.Selvi	Dean-Academics	Members	Paavai Engineering College
8.	Dr.A.Manikandan	Professor, CSE (IOT)		Paavai Engineering College
9.	Mr.S.Sathish	Assistant Professor, CSE (IOT)		Paavai Engineering College
10.	Dr.R.Sivakumar	Assistant Professor, CSE (IOT)		Paavai Engineering College
11.	Ms.D.Kanagavalli	Assistant Professor, CSE (IOT)		Paavai Engineering College
12.	Dr.N.Vanitha	Associate Professor		Paavai Engineering College
13.	Ms.G.Vennila	Assistant Professor, CSE		Paavai Engineering College





## Agenda

➤	Welcome Address
➤	Vision and mission of Institution and Department.
➤	PEOs, POs and PSOs of UG and PG Programmes.
➤	Confirmation of the minutes of the 3 <sup>rd</sup> Board of studies meeting held on 10.12.2024 and action taken report.
➤	<b>Framing of Curriculum and Syllabus</b> <ul style="list-style-type: none"><li>• Feedback from Stakeholders</li><li>• Syllabus Review Committee (SRC) – 24.12.2024 @ 11 am</li><li>• Department Advisory Committee (DAC) – 24.12.2024 @ 7 pm</li></ul>
➤	<b>To consider &amp; approve the Curriculum and Syllabus of 4<sup>th</sup> semester and Professional Electives (Vertical Subjects 1,2 and 3 ) of B.E Computer Science and Engineering (Internet of Things) Programme under Regulations 2023.</b> <ul style="list-style-type: none"><li>• Curriculum, Credits and its structure</li><li>• Syllabus</li><li>• List of Professional Electives</li><li>• List of Open Electives</li><li>• List of One Credit Courses</li><li>• List of Value added courses</li><li>• List of Mandatory courses</li></ul>
➤	To discuss and approve Transfer of Credits.
➤	To discuss and approve fast track mode for eligible students.
➤	To discuss and approve Assessment Weightage.
➤	Any other items relevant to the board of studies.





## Minutes of the BoS Meeting

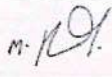


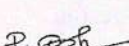
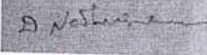
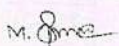
BoS / CSE (IOT) 4.1	:	The Board of studies Chairman welcomed the members.
BoS / CSE (IOT) 4.2	:	Vision and mission of Institution and Department were described.
APPROVED THE SAME.		
BoS / CSE(IOT) 4.3	:	PEOs, POs and PSOs of UG and PG Programme were described.
APPROVED THE SAME.		
BoS / CSE(IOT) 4.4	:	The minutes of the 3 <sup>rd</sup> Board of Studies meeting held on 18.05.2024 were communicated to the members. The comments received have been incorporated and placed for confirmation.
APPROVED THE SAME.		
BoS / CSE(IOT) 4.5	:	To consider & approved the Curriculum and Syllabus of 4 <sup>th</sup> semester and Professional Electives (Vertical Subjects 1,2 and 3 ) of B.E Computer Science and Engineering (Internet of Things) Programmes under Regulations 2023.
Suggestions given by the members regarding UG syllabus:		
<u>VERTICAL-II SOFTWARE DEVELOPMENT</u>		
1.	Mobile App Development for IoT	
	<ul style="list-style-type: none"><li>Suggested to include iOS concept.</li></ul>	
2	IoT Platforms and System Design	
	<ul style="list-style-type: none"><li>Suggested to redefine the Unit IV as Python Programming for IOT Devices</li></ul>	
3	DEVoPS	
	<ul style="list-style-type: none"><li>Given the suggestion to update with latest tools in Unit – III</li></ul>	
<u>VERTICAL-III DATA CENTER TECHNOLOGIES</u>		
1.	Virtualization	
	<ul style="list-style-type: none"><li>Suggested to change the course title as Data Virtualization to “Virtualization”</li></ul>	





APPROVED THE SAME.		
BoS / CSE(IOT) 4.6		Discussed and got approval about B.E/B.Tech (Minor in other Specialization)
BoS / CSE(IOT) 4.7	:	Discussed and got approval for Transfer of Credits for NPTEL Courses.
BoS / CSE(IOT) 4.8	:	Discussed and got approval for fast track mode for eligible students.
BoS / CSE(IOT) 4.9	:	Discussed and got approval for Assessment Weightage.

The above suggestions were given by the members and approved the Curriculum and Syllabus of 4<sup>th</sup> semester and Professional Electives (Vertical Subjects 1, 2 and 3) of B.E Computer Science and Engineering (Internet of Things) Programmes under Regulations 2023, one credit courses, open electives, verticals, value added courses, amendment, mandatory courses and panel of examiners.

Position in the committee	Chairman	University Nominee	Academic Expert	Academic Expert	Industry Expert	Alumni
Name & Designation	Dr.M.Rameshku mar, Professor & Head/CSE (IOT)	Dr.D.Indumathi ASP/CSE, PSG College of Technology, Coimbatore.	Dr.R.Mohan, ASP/CSE NIT, Trichy	Dr.P.Suresh, ASP/CSE. VIT, Vellore.	Mr.D.Nanthagopal, Technical Lead, Bosch Global Software and Technology Pvt. Limited, Coimbatore.	Mr.M.Sivakumar , Associate Engineer, J.P Morgan chase and Co. Lmt. Bengaluru.
Signature						





# PAAVAI ENGINEERING COLLEGE

(Autonomous Institution)

(Approved by AICTE and Affiliated to Anna University)

(Accredited by National Board of Accreditation, New Delhi & NAAC (UGC) with 'A' Grade)

Paavai Nagar, NH - 7, PACHAI NAMAKKAL - 637 018, Tamil Nadu

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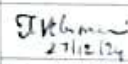
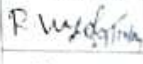

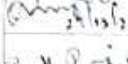
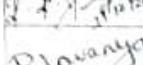
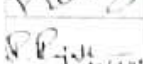
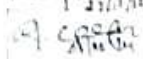

## DEPARTMENT OF CYBER SECURITY

### Minutes of 6<sup>th</sup> Board of Studies Meeting

VENUE: Placement G.D Hall

Date & Time: 27.12.2024 & 11.00 AM (Hybrid Mode)

The following members are present in 6<sup>th</sup> Board of Studies meeting

S.No	Name	Designation	Position in Committee	College / University / Industry	Signature with date
1	Dr. P. Muthusamy	Professor Cyber Security	Chairman	Paavai Engineering College	 27/12/24
2	Dr. K. Sathiyapriya	Associate Professor	University Nominee	PSG College of Technology, Coimbatore	 27/12/24
3	Dr. K. Annapurani	Professor	Academic Expert	SRM Institute of Science and Technology, Chennai	 27/12/24
4	Dr. N. Jaisankar	Professor (Higher Academic Grade)	Academic Expert	VIT University, Vellore	 27/12/24
5	Mr. B. Ponmanikandan	Engineering Manager	Industry Expert	TEMENOS India Pvt Ltd, Chennai	 27/12/24
6	Ms. R. Nagajothi	UI Developer	Alumni	Swipewire Technologies, Chennai	 27/12/24
7	Mrs. J. Velumani	ASP/ CYS	Members	Paavai Engineering College	 27/12/24
8	Mr. R. Loganathan	ASP/ CYS			 27/12/24
9	Mr. P. Sathishkumar	AP/ CYS			 27/12/24
10	Mrs. S. Ramya	AP/ CYS			 27/12/24
11	Mrs. R. K. Poongodi	AP/ CYS			 27/12/24
12	Mrs. P. Lavanya	AP/ CYS			 27/12/24
13	Mrs. R. Rajalakshmi	AP/ CYS			 27/12/24
14	Mrs. S. Chandrakala	AP/ CYS			 27/12/24



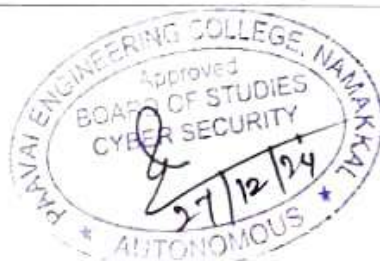


### Agenda

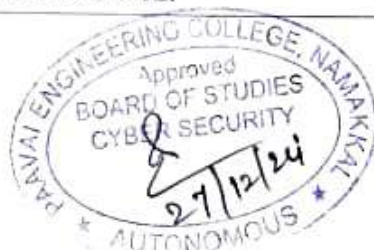
□	Welcome Address.
□	Vision and Mission of Institution and Department.
□	PEOs, POs and PSOs of UG Programme.
□	Confirmation of the minutes of the 5 <sup>th</sup> Board of studies meeting held on 18.05.2024 and action taken report.
□	<b>To consider &amp; approve the list of courses and syllabus of 4<sup>th</sup> semester and Vertical I, II and III B.E Cyber Security Programme under Regulations 2023.</b> <ul style="list-style-type: none"><li>• List of IV semester courses and syllabus</li><li>• List of Professional Electives and syllabus</li><li>• List of vertical I courses</li><li>• List of vertical II courses</li><li>• List of vertical II courses</li></ul>
□	To discuss about B.E/B.Tech Minors and Honors.
□	To discuss and approve transfer of credits related to NPTEL and equivalent courses.
□	To discuss and approve re-admitted students for additional course.
□	To discuss and approve fast track mode for eligible students.
□	To discuss and approve Assessment Weightage.
□	Any other points relevant to the board of studies.

### Minutes of the BoS Meeting

<b>BoS / CYS 6.1</b>	:	The Board of studies Chairman welcomed the members.
<b>BoS / CYS 6.2</b>	:	Vision and Mission of Institution and Department were described.
<b>APPROVED THE SAME.</b>		

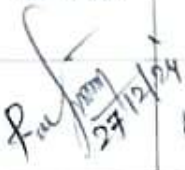
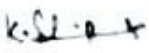




BoS / CYS 6.3	:	PEOs, POs and PSOs of UG Programme were described.
<b>APPROVED THE SAME.</b>		
BoS / CYS 6.4	:	The minutes of the 5 <sup>th</sup> Board of Studies meeting held on 18.05.2024 were communicated to the members. The comments received have been incorporated and placed for confirmation. The same was approved by the committee members.
<b>APPROVED THE SAME.</b>		
BoS / CYS 6.5	:	To consider & approve the Syllabi & Course Outcomes of IV semester and Verticals I, II and III for B.E Cyber Security Programme (CBCS) to be offered under Regulations 2023 with effect from the Academic Year 2023-2024 onwards.
<b>Suggestions given by the members regarding UG syllabus:</b>		
<b><u>Professional Electives and Verticals</u></b>		
1.	<b>Vertical I</b>	
		<ul style="list-style-type: none"> <li>• Latest Frontend Frameworks and Backend Frameworks courses could be added instead of Principles of Programming Languages.</li> <li>• Microservices course could be included instead of Software Defined Networks course.</li> </ul>
2.	<b>Vertical II</b>	
		<ul style="list-style-type: none"> <li>• Instead of Cloud Strategic Planning and Management course, include the course Cloud Resources Management.</li> <li>• If possible, add the courses like Amazon Web Services, 5G Network Security, Biometric Security and Cyber Security for E-commerce</li> <li>• Edge Computing course could be included instead of Stream Processing.</li> </ul>
3.	<b>Vertical III</b>	
		<ul style="list-style-type: none"> <li>• Quantum Cryptography course could be added.</li> <li>• Mobile Ad hoc Network Security course can be included.</li> <li>• For all courses, security related topics and case studies could be included as unit V.</li> <li>• Instead of Data Cleaning course, Data Wrangling and Preprocessing could be added.</li> </ul>
<b>RESOLVED AND APPROVED THE SAME.</b>		





The above suggestions were given by the members and approved the 4<sup>th</sup> semester syllabi and Verticals I, II and III for UG under R2023 for the students admitted in the year 2024-2025.

Position in the Committee	Chairman	University Nominee	Academic Expert	Academic Expert	Industry Expert	Alumni
Name & Designation	Dr P.Muthusamy Professor, Cyber Security	Dr K. Sathiyapriya, Associate Professor, PSG College of Technology, Coimbatore	Dr. K. Annapurani, Professor, SRM Institute of Science and Technology, Chennai	Dr N.Jaisankar, Professor (Higher Academic Grade) VIT University, Vellore	Mr B.Ponnamkandan, Engineering Manager, TILMENS India Pvt Ltd, Chennai	Ms R Nagajothi, UI Developer, Swipewire Technologies, Chennai
Signature						



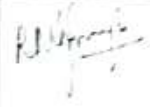
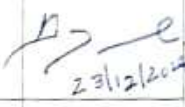
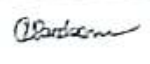
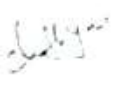

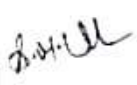


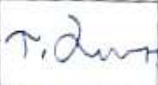
**PAAVAI ENGINEERING COLLEGE**  
(AUTONOMOUS)  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

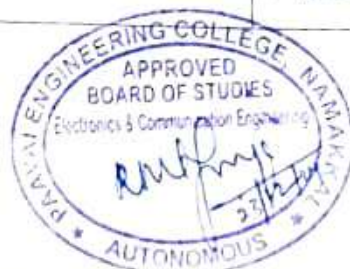
**Minutes of 11<sup>th</sup> Board of Studies Meeting**

**Venue: Placement Hall**

**Date and Time: 23.12.2024, 02.00 pm**

The 11<sup>th</sup> Board of studies meeting of the Department of Electronics and Communication Engineering was held on 23.12.2024 (Monday), at 02.00 pm in Placement Hall, Temple Tower Building, Paavai Engineering College, Pachal. The following members were present in the meeting.

1.	<b>Dr.R.Mohana Priya</b>	Associate Professor / ECE	Chairman	Paavai Engineering College	
2.	<b>Dr.T.Jayasree</b>	Assistant Professor / ECE	University Nominee	Centre for Medical Electronics, CEG Campus, Anna University, Chennai	 23/12/2024
3.	<b>Dr. R. Pandeeswari</b>	Professor / ECE	Academic Expert	NIT, Trichy	
4.	<b>Dr. Christhu Raj M R</b>	Associate Professor / Head	Academic Expert	Directorate of Learning and Development, SRM Institute of Science and Technology, Chennai.	
5.	<b>Mr.S. Robertmathan</b>	Program Manager	Industry Expert	L & T Technology Services Kolapakkam Chennai	
6.	<b>Mr.S.M.Chandru</b>	Firmware developer	Alumni	Intel Cerium systems Tech Mahindra Bangalore	
7.	<b>Dr. T.Aruna</b>	Professor/ECE	Members	Paavai Engineering College	
8.	<b>Dr.S.Vijayakumar</b>	Professor/ECE			
9.	<b>Dr.T.Loganayagi</b>	Professor/ECE			





10.	Dr.N.Angayarkanni	Professor / ECE	Members	Paavai Engineering College	N. Angayarkanni
11.	Dr.A.Parimala Gandhi	ASP/ECE			Dr.A.Parimala Gandhi
12.	Dr.M.Shantha Kumar	ASP/ECE			Dr.M.Shantha Kumar
13.	Dr.M.Udhayavani	ASP/ECE			Dr.M.Udhayavani
14.	Mrs.A.Samundeeswari	ASP/ECE			Mrs.A.Samundeeswari
15.	Mrs.E.Sangeetha	AP/ECE			Mrs.E.Sangeetha
16.	Mrs.C.Vanaja	AP/ECE			Mrs.C.Vanaja
17.	Mr.S.Vijayakumar	AP/ECE			Mr.S.Vijayakumar
18.	Dr.R.Pushpavalli	ASP/ECE			Dr.R.Pushpavalli
19.	Mr.R.Logarasu	AP Sr.G/ECE			Mr.R.Logarasu
20.	Mr.S.Loganathan	AP/ECE			Mr.S.Loganathan
21.	Mr.S.Satheesh Kumar	AP/ECE			Mr.S.Satheesh Kumar
22.	Mr.D.Satheesh Kumar	AP/ECE			Mr.D.Satheesh Kumar
23.	Mrs.S.Usha	AP/ECE			Mrs.S.Usha
24.	Mr.S.Vijay Murugan	AP/ECE			Mr.S.Vijay Murugan
25.	Mr.A.Saravanan	AP/ECE			Mr.A.Saravanan
26.	Mrs.R.Bhuvaneshwari	AP/ECE			Mrs.R.Bhuvaneshwari
27.	Mrs. N.Gangarani	AP/ECE			Mrs. N.Gangarani
28.	Mrs.S.Vijaya	AP/ECE			Mrs.S.Vijaya
29.	Mrs.A.Sujitha	AP/ECE			Mrs.A.Sujitha
30.	Mr.K.Venkatachalam	AP/ECE			Mr.K.Venkatachalam
31.	Mrs.R.Mythily	AP/ECE			Mrs.R.Mythily
32.	Mrs.A.Aarthi	AP/ECE			Mrs.A.Aarthi

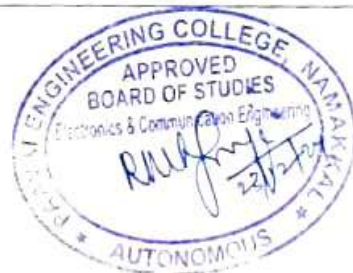


### Agenda

- Welcome Address
- Vision and mission of Institution and Department.
- PEOs, POs and PSOs of UG and PG Programme.
- Confirmation of the minutes of the 10<sup>th</sup> Board of studies meeting held on 08.05.2024 and action taken report.
- To discuss and approve Curriculum and Syllabus of professional electives (Verticals 1, 2 and 3) of BE (ECE) under Regulations 2023 for UG.
- To discuss about BE (Minor in other Specialization)
- To discuss and approve fast track mode for eligible students.
- To discuss about Examination Patterns
- Any other items relevant to the board of studies.

### Minutes of the BoS Meeting

BoS / ECE 10.1	:	The Board of studies Chairman welcomed the members.
BoS / ECE 10.2	:	Vision and mission of Institution and Department were described.
APPROVED THE SAME.		
BoS / ECE 10.3	:	PEOs, POs and PSOs of UG and PG Programme were described.
APPROVED THE SAME.		
BoS / ECE 10.4	:	The minutes of the 10 <sup>th</sup> Board of Studies meeting held on 08.05.2024 were communicated to the members. The comments received have been incorporated and placed for confirmation. The same was approved by the committee members.
APPROVED THE SAME.		
BoS / ECE 10.5	:	To consider & approve the Curriculum, Syllabus and Course Outcomes of professional electives (Verticals 1, 2 and 3) for B.E

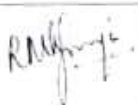
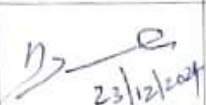
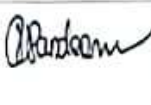
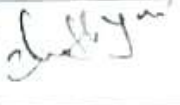
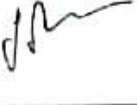
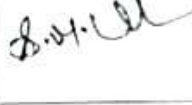




	Electronics and Communication Engineering Programme (CBCS) to be offered under Regulations 2023.
<b>Suggestions given by the members regarding professional electives (Verticals 1, 2 and 3) syllabus:</b>	
1.	Eight options can be given for each verticals
2.	Rearrangement of courses in the Verticals
3.	<b>EC23255 - Multimedia Compression Techniques</b> <ul style="list-style-type: none"> <li>In Unit 3, Specify the Compression Techniques</li> </ul>
4.	<b>EC23351 - Mixed Signal IC Design</b> <ul style="list-style-type: none"> <li>Design structure available can be included in the syllabus</li> </ul>
5.	<b>EC23352 - Analog IC Design</b> <ul style="list-style-type: none"> <li>Reframe the syllabus</li> </ul>
6.	<b>EC23353 - FPGA Based System Design</b> <ul style="list-style-type: none"> <li>Applications and Case Studies can be included</li> </ul>
7.	<b>EC23355 - CAD for VLSI</b> <ul style="list-style-type: none"> <li>Rearrange the contents</li> <li>Applications and Case Studies can be included</li> </ul>
8.	<b>EC23355 - Testing of VLSI circuits</b> <ul style="list-style-type: none"> <li>Rearrange the contents of Unit 1</li> </ul>
<b>RESOLVED AND APPROVED THE SAME.</b>	
<b>BoS / ECE 10.6</b>	<b>: Discussed about B.E/B.Tech (Minor in other Specialization)</b>
<b>BoS / ECE 10.7</b>	<b>: Discussed about NPTEL Courses and Professional Electives.</b>
<b>BoS / ECE 10.8</b>	<b>: Discussed about fast track mode for eligible students.</b>
<b>BoS / ECE 10.9</b>	<b>: Discussed about Assessment Weightage.</b>

The above suggestions were given by the members and approved the Professional Elective syllabi of BE (ECE) for Verticals 1, 2 and 3 under R2023 for the students admitted in the year 2024-2025, Minor degree, value added courses, mandatory courses and panel of examiners.



Position in the committee	Chairman	University Nominee	Academic Expert	Academic Expert	Industry Expert	Alumni
Name & Designation	Dr.R.Mohana Priya, Associate Professor & Head, ECE, PEC	Dr.T.Jayasree, AP, Centre for Medical Electronics, AU, Chennai	Dr. R. Pandeewari, Professor, ECE, NIT, Trichy.	Dr. Christhu Raj M R, AsP & Head, DLD, SRM Institute of Science and Technology, Chennai.	Mr. S. Robert mathan, Program Manager L & T Technology Services, Chennai.	Mr. S.M.Chandru Firmware developer Software Engineer II Intel Cerium systems Tech Mahindra Bangalore.
Signature		 23/12/2024				





**PAAVAI ENGINEERING COLLEGE**  
(AUTONOMOUS)  
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

**Minutes of 11<sup>th</sup> Board of Studies Meeting**

**Venue: Hybrid Mode**

**Date and Time: 30.12.2024, 10.00 a.m.**

The 11<sup>th</sup> Board of studies meeting of the Department of Electrical and Electronics Engineering was held on 30.12.2024(Monday), at 10.00 am through hybrid mode, Paavai Engineering College, Pachal. The following members were present in the meeting.

S.No	Name	Designation	Position in the Committee	College / University / Industry
1.	Dr.G.Balaji	HoD & Professor	Chairman	Paavai Engineering College
2.	Dr.K.Selvi	Prof./EEE	University Nominee	Thiagarajar College of Engineering, Madurai
3.	Dr.M.Jagabar Sathik	ASP/EEE	Academic Expert 1	SRM Institute of Science and Technology, Chennai
4.	Dr.V.Arunachalam	ASPMNE	Academic Expert 2	Department of Micro & Nano Electronics , VIT University, Vellore
5.	Mr.V.Subramanian	DGM - Training	Industry Expert	L&T Electrical & Automation, Ooty
6.	Ms.P.Rajarajeshwari,	Senior Manager	Alumni	SEG Automotive India Private Limited, Bengaluru
7.	Dr.K.Selvi	Dean Academics	Special Invitee	Paavai Engineering College
8.	Dr.B.Murali Babu	Professor	BoS Members	Paavai Engineering College
9.	Dr.A.Rathinam	Professor /EEE		Paavai Engineering College
10.	Dr.C.Arulkumar	ASP/EEE		Paavai Engineering College
11.	Mrs.G.Umamaheswari	ASP/EEE		Paavai Engineering College
12.	Dr.S.Suganya	AP/EEE		Paavai Engineering College
13.	Dr.S.Ramachandaran	AP/EEE		Paavai Engineering College
14.	Mr.M.Raja	AP/EEE		Paavai Engineering College
15.	Mr.R.Satheeshkumar	AP/EEE		Paavai Engineering College



## Agenda

➤	Welcome Address
➤	Vision and mission of Institution and Department.
➤	PEOs, POs and PSOs of UG and PG Programme.
➤	Confirmation of the minutes of the 10 <sup>th</sup> Board of studies meeting held on 07.05.2024 and action taken report.
➤	<b>To consider &amp; approve the Curriculum and Syllabus of Professional Elective verticals to B.E Electrical and Electronics Engineering Programme under Regulations 2023.</b> <ul style="list-style-type: none"> <li>• Curriculum, Credits and its structure</li> <li>• Syllabus</li> <li>• Verticals I,II,III of Professional Electives</li> </ul>
➤	<b>To discuss about B.E/B.Tech (Minor in other Specialization)</b>
➤	<b>To discuss and approve Assessment Weightage.</b>

### Minutes of the BoS Meeting

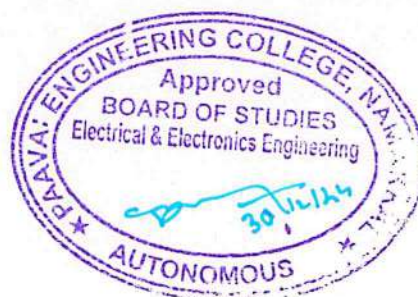
<b>BoS / EEE 10.1</b>	:	The Board of studies Chairman welcomed the members.
<b>BoS / EEE 10.2</b>	:	Vision and mission of Institution and Department were described.
<b>APPROVED THE SAME.</b>		
<b>BoS / EEE 10.3</b>	:	PEOs, POs and PSOs of UG and PG Programme were described.
<b>APPROVED THE SAME.</b>		
<b>BoS / EEE 10.4</b>	:	The minutes of the 10 <sup>th</sup> Board of Studies meeting held on 07.05.2024 were communicated to the members. The comments received have been incorporated and placed for confirmation.
<b>APPROVED THE SAME.</b>		
<b>BoS / EEE 10.5</b>	:	<b>To consider &amp; approve the Curriculum, Curriculum Structure, Syllabi &amp; Course Outcomes of Professional Elective Verticals for B.E Electrical and Electronics Engineering Programme (CBCS) to be offered under Regulations 2023 for the students admitted in the Academic Year 2023-2024 onwards.</b>


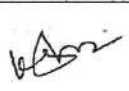
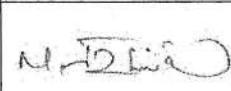
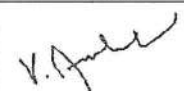
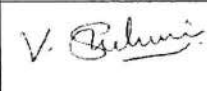



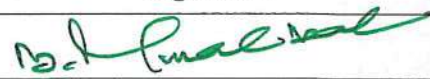
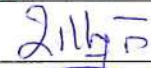








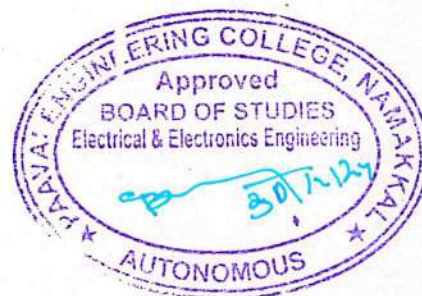
<b>Suggestions given by the members regarding UG syllabus:</b>		
<b><u>Vertical I – Energy and Power Systems Engineering</u></b>		
<b>1.</b>	<b><u>EE23153 : Power Quality</u></b>	
		<ul style="list-style-type: none"> <li>• Include book, Power Quality by C.Sankaran.</li> </ul>
<b><u>Vertical II – Converters and Drives</u></b>		
<b>1.</b>	<b><u>EE23251 : Advanced Semiconductor Devices</u></b>	
		<ul style="list-style-type: none"> <li>• Include FinFET effects in Silicon Carbide MOSFET concept.</li> </ul>
<b>2.</b>	<b><u>EE23255: SMPS and UPS</u></b>	
		<ul style="list-style-type: none"> <li>• Include EMC and EMI concepts.</li> </ul>
<b>3.</b>	<b><u>EE23257: Power Electronics for Renewable Energy Systems</u></b>	
		<ul style="list-style-type: none"> <li>• Include MPPT concepts in Solar and Wind energy systems.</li> <li>• Change unit 2 title as wind energy systems.</li> </ul>
<b><u>Vertical III – Electric Vehicle Technology</u></b>		
<b>1.</b>	<b><u>EE23351 : Electric Vehicle Architecture</u></b>	
		<ul style="list-style-type: none"> <li>• Include EV safety aspects in unit 1.</li> </ul>
<b>2.</b>	<b><u>EE23352 : Electric Vehicle Motors and Converters</u></b>	
		<ul style="list-style-type: none"> <li>• Include PMSM, SRM concepts.</li> </ul>
<b>3.</b>	<b><u>EE23353 : EV Batteries and Charging System</u></b>	
		<ul style="list-style-type: none"> <li>• Include wireless power transfer concept.</li> </ul>
<b>4.</b>	<b><u>EE23356 : Intelligent Control of Electric Vehicle</u></b>	
		<ul style="list-style-type: none"> <li>• Include case study concepts relating electric vehicle with AI, fuzzy or genetic algorithm.</li> </ul>
<b>RESOLVED AND APPROVED THE SAME.</b>		
<b>BoS / EEE 10.6</b>	<b>:</b>	<b>Discussed and got approved about B.E/B.Tech (Minor in other Specialization).</b>
<b>BoS / EEE 10.7</b>	<b>:</b>	<b>Discussed and got approved about Assessment Weightage.</b>

The above suggestions were given by the members and approved the profession elective verticals I,II,III syllabi for UG under R2023 for the students admitted in the year 2023-2024, minor degree, value added courses, mandatory courses and panel of examiners.



Position in the committee	Chairman	University Nominee	Academic Expert 1	Academic Expert 2	Industry Expert	Alumni
Name & Designation	Dr. G. Balaji Professor & Head, EEE	Dr. K. Selvi, Prof/EEE, Thiagarajar College of Engineering, Madurai.	Dr. M. Jagabar Sathik, ASP/EEE SRM Institute of Science and Technology, Chennai.	Dr. V. Arunachalam, ASP/MNE Department of Micro & Nano Electronics, VIT University, Vellore.	Mr. V. Subramanian, DGM-Training, L&T Electrical & Automation, Ooty.	Ms. P. Rajarajeshwari, Assistant Manager, SEG Automotive India Private Limited, Bengaluru.
Signature						

S.No	BoS Members	Designation	Signature
1.	Dr. B. Murali Babu	Professor	
2.	Dr. A. Rathinam	Professor /EEE	
3.	Dr. C. Arulkumar	ASP/EEE	
4.	Mrs. G. Umamaheswari	ASP/EEE	
5.	Dr. S. Suganya	AP/EEE	
6.	Dr. S. Ramachandaran	AP/EEE	
7.	Mr. M. Raja	AP/EEE	
8.	Mr. R. Satheeshkumar	AP/EEE	





**PAAVAI ENGINEERING COLLEGE (Autonomous)**  
**DEPARTMENT OF MECHANICAL ENGINEERING**

**Minutes of 11<sup>th</sup> Board of Studies Meeting**

**Date and Time: 31.12.2024, 10.00 AM – Online Mode**

The 11<sup>th</sup> Board of Studies meeting of the Department of Mechanical Engineering and Safety and Fire Engineering was held on 31.12.2024 (Tuesday), at 10.00 am through Online Mode, at Paavai Engineering College. The following members were present for the meeting.

S.No	Name	Designation	Position in the Committee	College / University / Industry
1.	Dr.A.P.Sivasubramaniam	HoD & Prof / Mech	Chairman	Paavai Engineering College.
2.	Dr.K.Kannan	Prof/ Mech	University Nominee	PSG College of Technology, Coimbatore.
3.	Dr.R.Jeyapaul	Prof/ Mech	Academic Expert 1	National Institute of Technology, Trichy.
4.	Dr.G.Sundaramali	ASP/ Mech	Academic Expert 2	School of Mechanical Engineering, VIT Vellore Campus, Vellore.
5.	Mr.A.Maheshkumar	Manager	Industry Expert	AGM-Head Industrial Engineering, SEForge Limited, Coimbatore.
6.	Mr.K.Sakthivel	Assistant Manager	Alumni	Mutiara Thermal Power Plant, Tuticorin.
7.	Dr.M.Premkumar	Principal	Members	Paavai Engineering College
8.	Dr.K.K.Ramasamy	Prof/ Mech		
9.	Dr.K.Sundara Murthy	Prof/ Mech		
10.	Dr.M.Makesh	Prof/ Mech		
11.	Dr.S.Maniraj	ASP/ Mech		
12.	Dr.S.T.Kumaravel	ASP/ Mech		
13.	Dr.V.Senthilkannan	ASP/ Mech		
14.	Dr.M.S.Vijayanand	ASP/ Mech		
15.	Dr.M.Selvaraj	ASP/ Mech		
16.	Dr.P.Pugalenthi	ASP/ Mech		
17.	Mr.S.Prabhakaran	ASP/ Mech		
18.	Mr. K.Anand	AP/ Mech		
19.	Mr.T.Sathees	AP/ Mech		
20.	Mr.R.Meiyazhagan	AP/ Mech		



### Agenda

- ❖ The Chairman, Board of Studies welcomed the members.
- ❖ Vision and Mission of Institution and Department.
- ❖ PEOs, POs and PSOs of UG Programme.
- ❖ Exemption from Professional Elective Courses for NPTEL courses
- ❖ Confirmation of the minutes of 10<sup>th</sup> Board of studies meeting held on 17.05.2024 and action taken report.
- ❖ Presentation of Curriculum and Syllabus of the Verticals I, II, & III of B.E. Mechanical Engineering Programme under Regulations 2023 and Presentation of Curriculum and Syllabus of M.E Engineering Design Programme under Regulations 2023.
  - Curriculum
  - Syllabus
  - List of Professional Electives
  - List of Open Electives
  - List of One Credit Courses
  - List of Value added courses
  - List of Mandatory courses
  - Amendments – M.E-ED
  - Programme Credit details

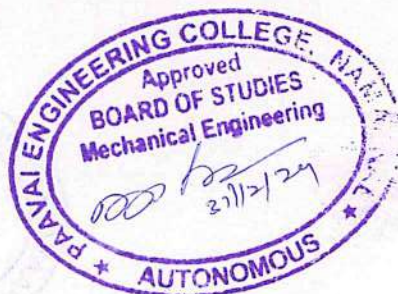
**BoS / MECH 11.1** : The Chairman, Board of Studies welcomed the members.

**BoS / MECH 11.2** : Vision and Mission of Institution and Department were described.

**BoS / MECH 11.3** : PEOs, POs and PSOs of UG Programme were elucidated.

**BoS / MECH 11.4** : The Minutes of the 10<sup>th</sup> Board of Studies meeting held on 17.05.2024 were communicated to the members. The comments received have been incorporated and placed for confirmation. The same was approved by the committee members.

**BoS / MECH 11.5** : Amendments for M.E Engineering Design Programme discussed –All the three Special Elective courses have been moved to professional elective courses.





**Suggestions given by the members regarding UG (Mech) & PG syllabus:**

**VERTICALS**

**1. ME23153 -Machine Tool Design**

- In Unit II some modifications are required as per latest trends.

**2. ME23256 - Lean Manufacturing**

- Include the topic “Value Stream Mapping (VSM) technique” in appropriate unit.

**3. ME23355 - Plant Layout and Materials Handling**

- Include some latest techniques in appropriate unit.
- If Possible include case studies and new tools in the respective domain in unit V.
- Add advanced topics to the 5<sup>th</sup> unit of possible courses.
- Allot appropriate weightage to the PSO's.
- Advice the students to choose the NPTEL course other than curriculum.

**Amendments for M.E Engineering Design Programme**

- The Special Elective category has been removed.
- The following three Professional Elective courses have been removed from the curriculum.

Course Code	Course Title	L	T	P	C
PED23162	Wearable Technologies	3	0	0	3
PED23164	Bio Materials	3	0	0	3
PED23167	Bearing Design and Rotor Dynamics	3	0	0	3

- The following three existing special elective courses have been added as Professional Elective courses in the curriculum.


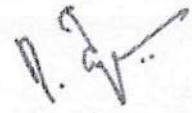


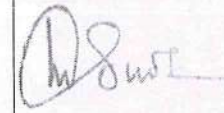
Course Code	Course Title	L	T	P	C
PMR23001	Materials Characterization Techniques	3	0	0	3
PMR23002	Composite Materials and Testing	3	0	0	3
PMR23003	Soft Computing	3	0	0	3

RESOLVED AND APPROVED THE SAME



The BoS members suggested valuable inputs on syllabus contents and for the overall improvement.



Position in the committee	University Nominee	Academic Expert	Academic Expert	Industry Expert	Alumni
Name & Designation	Dr.K.Kannan Prof/ Mech	Dr.R.Jeyapaul, Prof/ Mech	Dr.G.Sundaramali, ASP/ Mech	Mr.A.Maheshkumar, Manager	Mr.K.Sakthivel Assistant Manager
e-Signature					





**PAAVAI ENGINEERING COLLEGE**  
(AUTONOMOUS)  
**DEPARTMENT OF MECHATRONICS ENGINEERING**  
**Minutes of 11<sup>th</sup> Board of Studies Meeting**

**Venue: Department of Mechatronics Engineering**

**Date and Time: 28.12.2024, 02.00 p.m.**

The 11th Board of studies meeting of the Mechatronics Engineering Department was held on 28.12.2024 at 02.00 pm through online mode. Organized by the Department of Mechatronics Engineering, Paavai Engineering College, Pachal. The following members were present for the meeting.

S.No	Name	Designation	Position in the Committee	College / University / Industry
1.	Dr.D.R.P.Rajarathnam	HoD & Prof / MCT	Chairman	Paavai Engineering College.
2.	Dr.V.Sathiesh Kumar	Assistant Professor	University Nominee	MIT Campus, Anna University, Chennai.
3.	Dr. T.C.Kanish	Professor	Academic Expert	VIT, Vellore
4.	Dr. S.Syath Abuthakeer	Associate Professor	Academic Expert	PSG College of Technology, Coimbatore.
5.	Mr.L.Devarajan	Manager	Industry Expert	M/s. L.G. Balakrishnan & Bros LTD – Coimbatore.
6.	Mr.J Mithun Dass	Design Engineer	Alumni	Quarks Automation and Robotics, Chennai.
7.	Mrs.G.Umamaheswari	Associate Professor /EEE	Member	Paavai Engineering College
8.	Mr.S.Rajesh	ASP/CSE		
9.	Mr.N.Moorthy	AP/Civil		
10.	Dr. R.T.Ajaykarthik	Prof/MCT		
11.	Dr. C. Suresh	ASP/MCT		
12.	Mr. S.Manikandan	AP/MCT		
13.	Mr. R.Arunbabu	AP/MCT		
14.	Mr. C.Vibin Stalin	AP/MCT		



## Agenda

- Welcome Address
- Vision and mission of Institution and Department.
- PEOs, POs and PSOs of UG and PG Programme.
- Confirmation of the minutes of the 10th Board of studies meeting held on 13.05.2024 and action taken report.
- To consider & approve the Curriculum and Syllabus of 4<sup>th</sup> semester and Professional Electives (Verticals I, II and III) of B.E. Mechatronics Engineering Programme under Regulations 2023.
  - Curriculum, Credits and its structure
  - Syllabus
  - List of Professional Electives (Verticals I, II and III)
- To discuss and approve NPTEL Course & Professional Elective Exemption.
- To discuss and approve fast track mode for eligible students.
- To discuss and approve Assessment Weightage.

### Minutes of the BoS Meeting

BoS / MCT 11.1 : The Board of studies Chairman welcomed the members.

BoS / MCT 11.2 : Vision and Mission of Institution and Department were described.

**APPROVED THE SAME.**

BoS / MCT 11.3 : PEOs, POs and PSOs of UG and PG Programme were described.

**APPROVED THE SAME.**

BoS / MCT 11.4 : The minutes of the 10<sup>th</sup> Board of Studies meeting held on 13.05.2024 were communicated to the members. The comments received have been incorporated and placed for confirmation.

**APPROVED THE SAME.**

BoS / MCT 11.5 : To consider & approve the Curriculum, Curriculum Structure, Syllabi & Course Outcomes of 4<sup>th</sup> semester and Professional Electives (Verticals I, II and III) for B.E. – Mechatronics Engineering Programme (CBCS) to be offered under Regulations 2023 with effect from the Academic Year 2024-2025 onwards.





**Suggestions given by the members regarding UG syllabus:**

**Vertical - I**

**1. Automotive System Modelling and Simulation**

- Title of course need to be modified.

**Vertical - II**

**1. Design for Manufacturing**

- Title of unit 5 need to be modified.

**2. Advanced Manufacturing Technology**

- Contents of unit 5 need to be changed.

**3. Additive Manufacturing Technologies**

- Cost estimation content need to be included in unit 5.

**4. Introduction to Finite Element Analysis**

- Prescribed hours need to be changed.

**Vertical - III**

**1. Fundamental Design of Robot Elements**

- Prescribed hours need to be changed.

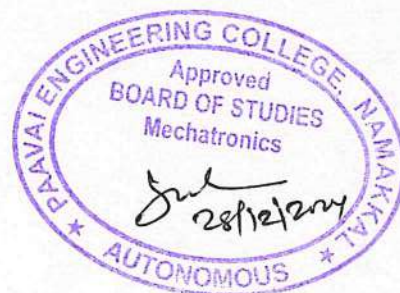
**2. Introduction to AI in Robotics**

- AI related contents need to be increased.
- Case studies on AI to be included in unit 5.
- Text books need to updated version and it should be available in library for each course.

**List of Professional Elective Exemption with NPTEL Course:**

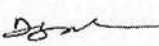

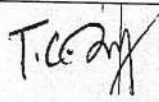
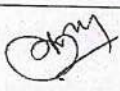
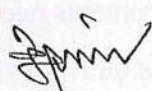

S.No	Sem	Professional Elective	NPTEL Course
1	VI	MT20253 - Additive Manufacturing	Advances in Additive Manufacturing of Materials: Current status and emerging opportunities
2	VII	MT20352 - Non-Traditional Machining Processes	Advanced Machining Processes
3	VII	MT20452 - Renewable Energy Sources	Renewable Energy Engineering: Solar, Wind And Biomass Energy Systems
4	VIII	MT20651 - Industrial Internet of Things	Introduction to Industry 4.0 And Industrial Internet of Things
5	VIII	MT20653 - Embedded System Design	Introduction to Embedded System Design

**RESOLVED AND APPROVED THE SAME.**



- BoS / MCT 11.6** : Discussed and got approved about Curriculum Structure, Syllabi & Course Outcomes of 4<sup>th</sup> semester and Professional Electives (Verticals I, II and III).
- BoS / MCT 11.7** : Discussed and got approved about NPTEL Course & Professional Elective Exemption.
- BoS / MCT 11.8** : Discussed and got approved about fast track mode for eligible students.
- BoS / MCT 11.9** : Discussed and got approved about Assessment Weightage.

The above suggestions were given by the members and approved the Curriculum Structure, Syllabi & Course Outcomes of 4th semester and Professional Electives (Verticals I, II and III) for UG under R2023 for the students admitted in the year 2023-2024 and NPTEL Course & Professional Elective Exemption and panel of examiners.

Position in the committee	Chairman	University Nominee	Academic Expert	Academic Expert	Industry Expert	Alumni
Name & Designation	Dr. D.R.P.Rajaratnam Professor & Head, MCT	Dr. V. Sathiesh Kumar, AP, ECE, MIT, Chennai.	Dr. T.C. Kanish Professor, VIT, Vellore	Dr. S. Syath Abuthakeer, ASP, PSG, Coimbatore	Mr. L. Devarajan, Manager, M/s. L.G. Balakrishnan & Bros LTD, Coimbatore.	Mr. J. Mithun Dass, Design Engineer, Quarks Automation and Robotics, Chennai.
Signature						





**PAAVAI ENGINEERING COLLEGE**  
**(AUTONOMOUS)**  
**DEPARTMENT OF ROBOTICS AND AUTOMATION**

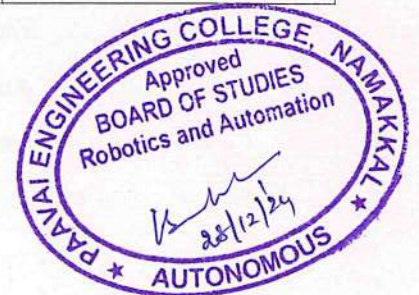
**Minutes of 4<sup>th</sup> Board of Studies Meeting**

**Online: Microsoft Teams**

**Date and Time: 28.12.2024, 2.00 P.M**

The 4<sup>th</sup> Board of studies meeting of the Robotics and Automation Department was held on 28.12.2024 (Saturday), at 2.00 PM in Department of Robotics and Automation, Paavai Engineering College through online mode. The following members were present in the meeting.

S.No	Name	Designation	Position in the Committee	College / University / Industry
1.	Dr. V.Subburam	Prof / R&A	Chairman	Paavai Engineering College.
2.	Dr. V. Sathiesh Kumar	Assistant Professor	University Nominee	MIT Campus, Anna University, Chennai.
3.	Dr. T.C. Kanish	Professor	Academic Expert	VIT, Vellore
4.	Dr. S. Syath Abuthakeer	Associate Professor	Academic Expert	PSG College of Technology, Coimbatore.
5.	Mr. L. Devarajan	Manager	Industry Expert	M/s. L.G. Balakrishnan & Bros LTD – Coimbatore.
6.	Mr. J. Mithun Dass	Design Engineer	Alumni	Quarks Automation and Robotics, Chennai.
7.	Mr.M.Matheswaran	Associate Professor /R&A	Member	Paavai Engineering College
8.	Mr. K. Mohanraj	AP/R&A		
9.	Mr. R. Bharath	AP/R&A		
10.	Mr. S. Suryakumar	AP/R&A		
11.	Ms. P. Elakkiya	AP/R&A		
12.	Mr. V. Kumarakrishnan	AP/R&A		



## Agenda

- Welcome Address
- Vision and mission of Institution and Department.
- PEOs, POs and PSOs of UG Programme.
- Confirmation of the minutes of the 3rd Board of studies meeting held on 13.05.2024 and action taken report.
- To consider & approve the Curriculum and Syllabus of 4<sup>th</sup> semester and Professional Electives (Verticals I, II and III) of B.E. Robotics and Automation Programme under Regulations 2023.
  - Curriculum, Credits and its structure
  - Syllabus
  - List of Professional Electives (Verticals I, II and III)
- To discuss and approval for NPTEL Course & Professional Elective Exemption.
- To discuss and approval for fast track mode for eligible students.
- To discuss and approval for Assessment Weightage.

### Minutes of the BoS Meeting

- BoS / RA 4.1 : The Board of studies Chairman welcomed the members.
- BoS / RA 4.2 : Vision and Mission of Institution and Department were described.

**APPROVED THE SAME.**

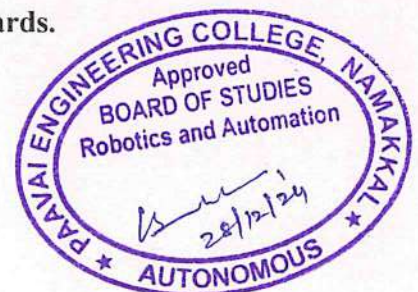
- BoS / RA 4.3 : PEOs, POs and PSOs of UG and PG Programme were described.

**APPROVED THE SAME.**

- BoS / RA 4.4 : The minutes of the 3<sup>rd</sup> Board of Studies meeting held on 13.05.2024 were communicated to the members. The comments received have been incorporated and placed for confirmation.

**APPROVED THE SAME.**

- BoS / RA 4.5 : To consider & approve the Curriculum, Curriculum Structure & Syllabi & Course Outcomes of 4<sup>th</sup> semester and Professional Electives (Verticals 1, 2 & 3) under R2023 of B.E. Robotics and Automation programme (CBCS) to be offered and with effect from the Academic Year 2025-2026 onwards.





**Suggestions given by the members regarding UG syllabus:**

**Vertical - I**

**1. Drone Technologies**

- Text and Reference books should be latest editions

**2. Agricultural Robotics and Automation**

- In unit 5, latest developments in the automation of agricultural field can be included

**Vertical - II**

**1. Computer Integrated Manufacturing**

- The syllabus contents of Units II, III & IV should be reduced

**2. Advanced Manufacturing System**

- The title of the course should be changed appropriately

**Vertical -III**

**1. Vehicle Dynamics and Control**

- In all the units, syllabus contents should be reduced appropriately

**General suggestions**

- Format should be checked for uniformity
- All the Text and Reference books should be of updated versions

**RESOLVED AND APPROVED THE SAME.**

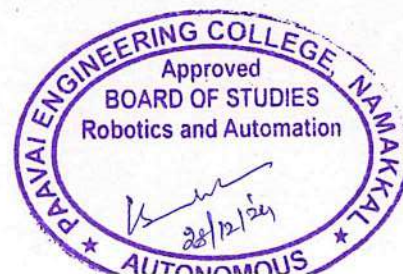
**BoS / RA 4.6 : Discussed and got approval for Curriculum Structure, Syllabi & Course Outcomes of 4<sup>th</sup> semester and Professional Electives (Verticals I, II and III).**



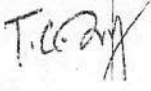

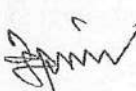

**BoS / RA 4.7 : Discussed and got approval for Transfer of Credits for NPTEL Courses.**

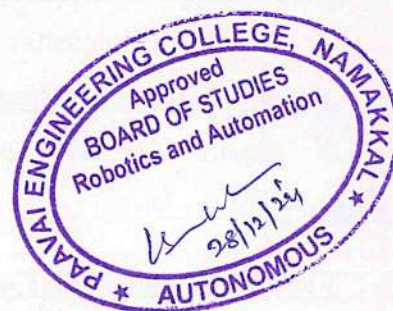
**BoS / RA 4.8 : Discussed and got approval for fast track mode for eligible students.**

**BoS / RA 4.9 : Discussed and got approval for Assessment Weightage.**

The above suggestions were given by the members and approved the Curriculum Structure, Syllabi & Course Outcomes of 4th semester and Professional Electives (Verticals I, II and III) for UG under R2023 for the students admitted in the year 2023-2024 and NPTEL Course & Professional Elective Exemption and panel of examiners.



Position in the committee	Chairman	University Nominee	Academic Expert	Academic Expert	Industry Expert	Alumni
Name & Designation	Dr. V.Subburam	Dr. V. Sathiesh Kumar, AP, ECE, MIT, Chennai.	Dr. T.C. Kanish Professor, VIT, Vellore	Dr. S. Syath Abuthakeer, ASP, PSG, Coimbatore	Mr. L. Devarajan, Manager, M/s. L.G. Balakrishnan & Bros LTD, Coimbatore.	Mr. J. Mithun Dass, Design Engineer, Quarks Automation and Robotics, Chennai.
Signature						





**PAAVAI ENGINEERING COLLEGE**  
(Autonomous)  
**DEPARTMENT OF AGRICULTURAL ENGINEERING**

**Minutes of Eleventh Board of Studies Meeting**

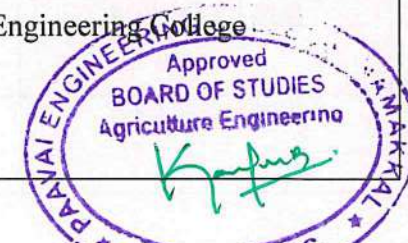
**Venue: ONLINE MODE**

**Date and Time: 27.12.2024, 11.00 A.m.**

Minutes of Eleventh Board of Studies meeting held on 27.12.2024 at 11.00 A.M in Department of Agricultural Engineering through online mode.

**The following members were present**

S. No	Name	Designation	Position in the Committee	College / University / Industry
1.	Dr. B.Kailashkumar	HOD (i/c) Agri	Chairman	Paavai Engineering College, Namakkal.
2.	Dr. P.S. Sudhakar Gandhi	Assistant Professor	University Nominee	Department of Biotechnology UCE-BIT Campus, Tiruchirappalli
3.	Dr. C. Mayilswami	Professor	Academic Expert-1	Karunya Institute of Technology and Sciences, Coimbatore – 641 111
4.	Dr.R.Rajam	Associate Professor	Academic Expert-2	Department of Food Technology, Kalasalingam Academy of Research and Education, Krishan kovil.
5.	T. Karthikeyan	Regional Engineer, Customer Support	Alumni	M/S. Mobitech, Erode
6.	Dr.K.Selvi	Dean Academics	Special Invitee	Paavai Engineering College
7.	Dr.P.Tamilchelvan	Professor/ Agri	Members	Paavai Engineering College
8.	Mrs.A.Subashini	AP/ Agri		
9.	Mrs.M.Bhuvaneswari	AP/ Agri		
10.	Mr.D.Anandan	AP/ Agri		
11.	Mr.A.Meignanamoothi	AP/ Agri		



12.	Mr.B.Mano	AP/ Agri		
13.	Mr.N.Satheswaran	AP/ Agri		
14.	Dr.G.Kiruba	AP/ Agri		
15.	Ms.K.S.Subha	AP/ Agri		
Member Absent				
1.	Mr.M.Annadurai	Managing Director	Industry Expert	Santhosh Agri Farms and Machinery Attur, Salem.

### Agenda

➤	<b>Welcome Address</b>
➤	<b>Vision and mission of Institution and Department.</b>
➤	<b>PEOs, POs and PSOs of UG programmes.</b>
➤	<b>Confirmation of the minutes of the 10<sup>th</sup> Board of studies meeting held on 10.05.2024 and action taken report.</b>
➤	<b>To consider &amp; approve the 4<sup>th</sup> semester and verticals I, II and III for B.Tech- Agricultural Engineering Programme under Regulations 2023.</b> <ul style="list-style-type: none"> <li>• Curriculum, Credits and its structure, Syllabus</li> <li>• Details of Fast track students and their courses.</li> <li>• Amendments if any</li> </ul>
➤	<b>To discuss and approve Transfer of Credits.</b>
➤	<b>To discuss and approve fast track mode for eligible students.</b>
➤	<b>To discuss and approve Assessment Weightage.</b>



### **MINUTES OF THE BOS MEETING**

<b>BoS / Agri 11.1</b>	<b>:</b>	The Board of studies Chairman welcomed the members.
<b>BoS / Agri 11.2</b>	<b>:</b>	Vision and mission of Institution and Department were



		described.
APPROVED THE SAME.		
BoS / Agri 11.3	:	PEOs, POs and PSOs of UG and PG Programme were described.
APPROVED THE SAME.		
BoS / Agri 11.4	:	The minutes of the 10 <sup>th</sup> Board of Studies meeting held on 10.05.2024 were communicated to the members. The comments received have been incorporated and placed for confirmation. The same was approved by the committee members.
APPROVED THE SAME		
BoS / Agri 11.5	:	To consider & approve the Curriculum, Curriculum Structure, Syllabi & Course Outcomes of IV semester and verticals I, II and III for B.Tech - Agricultural Engineering Programme (CBCS) to be offered under Regulations 2023 with effect from the Academic Year 2023-2024 onwards.
<b><u>VERTICALS I- FOOD PROCESSING ENGINEERING</u></b>		
1.	AI23154- FOOD AND DAIRY PROCESS ENGINEERING	
	<ul style="list-style-type: none"><li>Members suggested that, some repetition of syllabus contents in Food and Dairy Process Engineering should be altered.</li></ul>	
2.	AI23156-FOOD PLANT DESIGN AND MANAGEMENT	
	<ul style="list-style-type: none"><li>Introduction of Food Plant Design Course is a need of the day subject and it is appreciable as included in the verticals.</li></ul>	
<b><u>VERTICALS II- IRRIGATION AND WATER TECHNOLOGY</u></b>		
3.	The advanced technologies and terminologies introduced are welcoming and enhance the students to be industry ready for placement opportunities.	
4.	AI23255- INTEGRATED WATER RESOURCES AND PARTICIPATORY MANAGEMENT	
	<ul style="list-style-type: none"><li>Members suggested that, the Role of Stake Holder can be introduced in the syllabus.</li></ul>	



**VERTICAL III – FARM MACHINERY**

5.	AI23356- TESTING AND EVALUATION OF FARM MACHINERY AND EQUIPMENT
	<ul style="list-style-type: none"><li>Members suggested to include the topic “Safety Testing Of Agricultural Machinery” in the Unit –V to understand the safety standards and protocols in handling of heavy equipment’s.</li></ul>
6.	AI23354- SPECIAL FARM MACHINERY AND EQUIPMENT
	<ul style="list-style-type: none"><li>Members suggested adding modern tree climbing devices, tractor operated hoist in Unit V to enrich the harvesting machinery.</li></ul>
7.	Members suggested to, frame the syllabus according to sustainable goal development and incorporate
8.	In Design thinking, the projects undertaken by the students must be different in mini project and project work.
9.	Verticals must be framed such that it must possess practical knowledge for students.



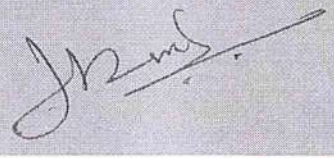
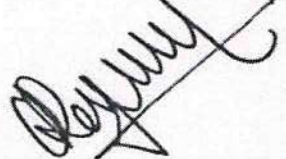

**RESOLVED AND APPROVED THE SAME.**

BoS / Agri 11.6	:	Discussed and got approved about Transfer of Credits for NPTEL Courses.
<b>APPROVED THE SAME.</b>		
BoS / Agri 11.7	:	Discussed and got approved about re-admitted students for additional course.  Nil for the Academic Year – (2023-2024)
BoS / Agri 11.8	:	Discussed and got approved about fast track mode for eligible students.
BoS / Agri 11.9	:	Discussed and got approved about Assessment Weightage.





The above suggestions were given by the members and approved the overall curriculum and syllabi for the UG programme of Regulations 2023 (CBCS) for students admitted during the year 2023 - 2024 , Verticals and Panel of Examiners.

S.NO	NAME	POSITION IN THE COMMITTEE	SIGNATURE
1.	Dr. B.Kailashkumar	HOD (i/c) Chairman	
2.	Dr. P.S. Sudhakar Gandhi Assistant Professor	University Nominee	
3.	Dr. C. Mayilswami Professor	Academic Expert-I	
4.	Dr.R.Rajam Professor	Academic Expert-II	
5.	Mr.M.Annadurai	Industrial expert	Absent
6.	T. Karthikeyan Engineer,	Alumni	



**PAAVAI ENGINEERING COLLEGE (Autonomous)**  
**DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE**

**Minutes of 3<sup>rd</sup> Board of Studies Meeting**

**Date and Time: 31.12.2024, 10.00 AM – Online Mode**

The 3<sup>rd</sup> Board of Studies meeting of the Department of Artificial Intelligence and Data Science was held on 31.12.2024 (Tuesday), at 10.00 am through Online Mode, at Paavai Engineering College. The following members were present for the meeting.

S.NO	NAME & DESIGNATION	POSITION IN COMMITTEE	COLLEGE/UNIVERSITY /INDUSTRY
1	Dr.M.Raja Professor & HOD / AIDS	Chairman	Paavai Engineering College
2	Dr.K.Sathya priya, Associate Professor / CSE	University Nominee	PSG College of Technology, Coimbatore.
3	Dr.S.Prabu, Associate Professor	Academic Expert	Pondicherry University, Pondicherry
4	Dr.S.SriVidhya, Professor& Head / ISE	Academic Expert	BNM Institute of Technology, Bangalore.
5	Mr.A.Kishore Chowdary, CEO	Industry Expert	Cloudbeaver Technologies Private Limited, Hosur
6	Mrs.M.Sathya Sundaram Associate Professor	Member	Paavai Engineering College
7	Mrs.S.Saranya Devi Assistant Professor	Member	Paavai Engineering College

**Agenda**

- The Chairman, Board of Studies welcomed the members.
- Confirmation of the minutes of the 3<sup>rd</sup> Board of studies meeting held on 18.05.2024 and action taken report.
- Presentation of Curriculum and Syllabus of 4<sup>th</sup> semester B.Tech. Artificial Intelligence and Data Science Programme under Regulations 2023.
  - Curriculum, Credits and its structure
  - Syllabus
  - List of Professional Electives
  - List of Open Electives
  - List of Value-added courses
  - List of Mandatory courses

**BoS / AIDS 3.1** : The Board of studies Chairman welcomed the members.





**BoS / AIDS 3.2** : The minutes of the 3<sup>rd</sup> Board of Studies meeting held on 18.05.2024 were communicated to the members. The comments received have been incorporated and placed for confirmation. The same was approved by the committee members.

**BoS/ AIDS 3.3** : To consider & approve the Curriculum, Curriculum Structure & Syllabi of IVth semester for B.Tech. – Artificial Intelligence and Data Science (CBCS) to be offered under R-2023 with effect from the Academic Year 2023-2024 onwards.

**Suggestions given by the members regarding UG syllabus**

- To Remove the repeated contents of the syllabus of Database Management Systems- IV Semester
- Redefine Credit Points for the core paper Probability and Statistics with R Programming in IV Semester as Integrated Subject with theory and Practical
- To consider the students attended “Two Weeks Internship at UPMSA University Malaysia” in the Mark Grade Sheet as 1 Credit for the below mentioned students.

**1. Vertical – I (AI Engineering)**

- Ensure that the syllabus of Explainable AI should be reduced.
- AI and Blockchain can be introduced
- Instead of Computer Vision , Machine Vision subject can be introduced

**2. Vertical – II (Full Stack Development)**

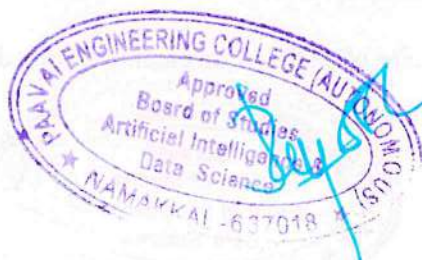
- The members suggested to include AI in Front end development
- To include Spring Boot under Micro services domain

**3. Vertical - III – (Cloud and Data Center Technologies)**

- Redefine the Subjects under the Vertical III and hence AI in Cloud Computing can be included
- AI in E-Commerce can be introduced instead of E-Commerce.

**4. Vertical - V – (Data Science)**

- AI in E-Commerce can be introduced instead of E-Commerce.
- R Programming can be removed since it's there in the Core subject



#### **5. Vertical - VI – (Emerging Technologies)**

- Cyber Security can be replaced with AI for Cyber Security
- Large Language Models subject can be introduced in this vertical

#### **6. Vertical - VII – (Machine Learning)**

- Deep Learning subject can be changed to Deep Reinforcement Learning

#### **General Suggestions**

- A student can be exempted from a professional elective course (verticals) provided that they have completed an NPTEL course with the similar syllabus.
- As a general suggestion, all the text books prescribed in the syllabus must be chosen from the latest edition, possibly it should be within last five years.





**List of Students attended Two Weeks Internship at UPMSA University Malaysia**

S. No	Reg. No	Name	Venue	Duration	Date
1	622123207031	Lohith S	UMPSA UNIVERSITY, Malaysia	2 weeks	14/11/2024 to 30/11/2024
2	622123207003	Afzal G	UMPSA UNIVERSITY, Malaysia	2 weeks	14/11/2024 to 30/11/2024
3	622123207042	Prasannakumar .S	UMPSA UNIVERSITY, Malaysia	2 weeks	14/11/2024 to 30/11/2024
4	622123207014	Dharun B	UMPSA UNIVERSITY, Malaysia	2 weeks	14/11/2024 to 30/11/2024
5	622123207051	Shriram V	UMPSA UNIVERSITY, Malaysia	2 weeks	14/11/2024 to 30/11/2024
6	622123207055	Sridhar S	UMPSA UNIVERSITY, Malaysia	2 weeks	14/11/2024 to 30/11/2024
7	622123207032	Madhan S	UMPSA UNIVERSITY, Malaysia	2 weeks	14/11/2024 to 30/11/2024
8	622123207024	Kaleeswari B	UMPSA UNIVERSITY, Malaysia	2 weeks	14/11/2024 to 30/11/2024
9	622123207052	Shruthihaa S	UMPSA UNIVERSITY, Malaysia	2 weeks	14/11/2024 to 30/11/2024
10	622123207045	Rashika B	UMPSA UNIVERSITY, Malaysia	2 weeks	14/11/2024 to 30/11/2024

**RESOLVED AND APPROVED THE SAME.**



The above suggestions were given by the members and approved the Curriculum under Regulations 2023 for 4<sup>th</sup> semester syllabi for the students admitted in the year 2023-2024 under Regulations 2023, open electives, verticals, value added courses, mandatory courses and panel of examiners.

Chairman

Dr. M. Raja

Professor and HOD/ AI&

DS

Position in the committee	Name & Designation	e-Signature
University Nominee	Dr.K.Sathya priya, Associate Professor / CSE	
Academic Expert 1	Dr.S.Prabu, Associate Professor	
Academic Expert 2	Dr.S.Sri Vidhya, Professor& Head / ISE	
Industry Expert	Mr.A.Kishore Chowdary, CEO	ABSENT
Alumunus	Mr.H.Raghul, Professional 1 System Administrator	







# PAAVAI ENGINEERING COLLEGE

(Autonomous Institution)

(Approved by AICTE and Affiliated to Anna University)

(Accredited by National Board of Accreditation, New Delhi & NAAC (UGC) with 'A' Grade)

Paavai Nagar, NH - 7, PACHAL, NAMAKKAL - 637 018. Tamil Nadu

☎ 04286-243038, 58,88 & 98 Fax: 04286-243068 Email: pecprincipal@paavai.edu.in website: http://pec.paavai.edu.in

Date: 23.12.2024

## Minutes of 4<sup>th</sup> Board of Studies Meeting

### DEPARTMENT OF BIOTECHNOLOGY

Venue: Online

Date and Time: 23-12-2024 & 11.00 A.M.

#### Members Present

S.No	Name	Designation	Position in the Committee	College / University / Industry	Signature
1	Dr.C.Nirmala	Professor & Head/ Biotechnolog y	Chairman	Paavai Engineering College	
2	Dr. S. Geetha	Assistant Professor / Biotechnolog y	University Nominee	University College of Engineering, BIT Campus, Anna University, Tiruchirappalli	
3	Dr.C.Rajasekaran	Professor / Biotechnolog y	Academic Expert	School of Bio Sciences and Technology, VIT University, Vellore	
4	Dr.M.Lakshmi Prabha	Assistant Professor (SG) / Biotechnolog y	Academic Expert	Karunya Institute of Technology and Sciences, Coimbatore	
5	Mr.S.Karthi	Manager- Quality Control	Industry Expert	S.V.Chem Intermediate Private Limited, Alathur, Thiruporur,	
6	Dr.V.S.Ramakrishna Ganduri	Professor / Biotechnolog y	BoS coordinator	Paavai Engineering College	



# PAAVAI ENGINEERING COLLEGE


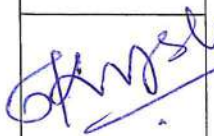

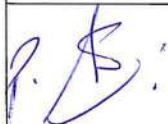
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7	Ms.M.Muthumani	Assistant Professor / Biotechnology	Members	Paavai Engineering College	
8	Mr.K.Vignesh	Assistant Professor / Biotechnology			
9	Mr.A.Muthuselvam	Assistant Professor / Biotechnology			
10	Mr.P.Saileswaran	Assistant Professor / Biotechnology			



### Agenda

1. The Chairman – Board of Studies welcomed the members.
2. Confirmation of the minutes of the 3<sup>rd</sup> Board of studies meeting held on 08.05.2024 and action taken report.
3. Presentation of Curriculum and Syllabus of 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup> semester of UG Programme of R2019, Curriculum and Syllabus of 4<sup>th</sup> semester and Professional Electives (Vertical 1) of UG Programme of R2023.
  - i. Programme Credit details
  - ii. Curriculum
  - iii. Syllabus
  - iv. List of Professional Electives
  - v. List of Open Electives
  - vi. List of Value-added courses
  - vii. List of Mandatory courses
  - viii. Amendments (if any)
4. Any other items

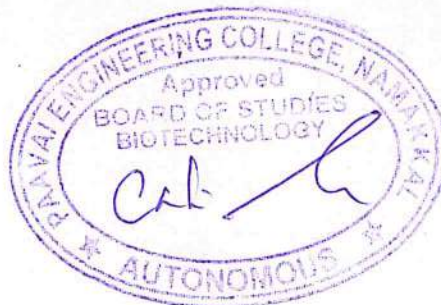
**BoS / BT 10.1** : The Chairman - Board of studies welcomed the members.

**BoS / BT 10.2:** College Vision and Mission, Department Vision and Mission, Programme Outcomes, Programme Educational Outcomes, Programme Specific Outcomes were presented.

**BoS / BT 10.3** : The minutes of the 3<sup>rd</sup> Board of Studies meeting held on 08.05.2024 were communicated to the members. The comments received have been incorporated and placed for confirmation. The same was approved by the committee members.

**BoS / BT 10.4** : To consider & approve the Curriculum Structure, Curriculum, & Syllabus of 6<sup>th</sup> – 8<sup>th</sup> Semesters for B.Tech- Biotechnology (CBCS) to be offered under R2019 and 4<sup>th</sup> Semester and Professional Electives (Vertical 1) for B.Tech- Biotechnology (CBCS) to be offered under R2023 with effect from the Academic Year 2025-2026 onwards.

**BoS / BT 10.5** : To consider & approve the Amendment in the Curriculum, & Syllabus of for 1<sup>st</sup> to 5<sup>th</sup> Semesters for B.Tech- Biotechnology (CBCS) offered under



R2019 and 1<sup>st</sup> to 3<sup>rd</sup> Semesters for B.Tech- Biotechnology (CBCS) under R2023.

➤ **Suggestions given by the members regarding UG syllabus**

**6<sup>th</sup> Semester courses of R2019**

- In 6<sup>th</sup> Semester, Genetic Engineering course in the title of Unit IV, replace the word "Genomes" as "Genome".
- In 6<sup>th</sup> Semester, Genetic Engineering Laboratory course, the list of Experiments has to be rearranged sequentially.
- For all the courses, frame course objectives using the format: "To enable the students to the following:" followed by capitalizing each action verb.
- In Immunology Course, include "Types & Classification of Vaccines" and add the topic "Active and Passive Vaccines in Unit V.
- In Downstream Processing Laboratory, Rename Experiment 7 as "Aqueous Two-Phase Extraction of Biological Samples" instead of "Aqueous Two-Phase Extraction of Biologicals."
- In the Final semester, the students shall take up only Project works by completing the theory courses by 7<sup>th</sup> Semester.

**Professional and Open Electives R2019**

- The courses such as Feed Products of the Poultry Industry, and Post-harvest Methods in Poultry Products may be incorporated as Open Electives or Value-added courses.

**Courses of R2023**

- The Value-Added Course "Waste Management by vermicomposting" can be reframed as "Biocomposting & Waste Management".

**Amendment in Bioorganic Chemistry Laboratory (II Sem)-2023R.**

- In Bioorganic Chemistry Laboratory with 1 credit in II Semester, the total number of experiments can be reduced to 7 by removing Experiment 3 or 4 or 8, Experiments 9 and 10.

**RESOLVED AND APPROVED THE SAME.**

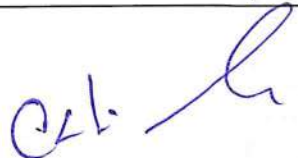

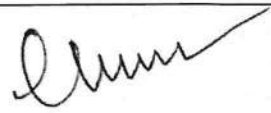

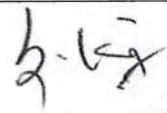
The above suggestions were given by the members and approved the Curriculum and Syllabi for the 4<sup>th</sup> Semester and Professional Electives (Vertical 1) for B.Tech- Biotechnology





(CBCS) to be offered under R-2023 and 6<sup>th</sup> -8<sup>th</sup> Semesters for B.Tech- Biotechnology (CBCS) to be offered under R-2019, and value added courses.

**THE MEMBERS PRESENT:**

S. No.	Position in the committee	Name & Designation	Signature
1.	<b>Chairman</b>	Dr. C. Nirmala Professor & Head, Biotechnology Paavai Engineering College, Namakkal	
2.	<b>University Nominee</b>	Dr. S. Geetha, Assistant Professor, Biotechnology, Anna University, Trichy	
3.	<b>Academic Expert</b>	Dr. C. Rajasekaran Professor, Biotechnology, Vellore Institute of Technology, Vellore	
4.	<b>Academic Expert</b>	Dr. M. Lakshmi Prabha, Assistant Professor (Senior Grade), Biotechnology, Karunya Institute of Technology and Sciences, Coimbatore	
5.	<b>Industry Expert</b>	Mr. S. Karthi, Manager-Quality Control, S. V. Chem Intermediate Private Limited, Chennai	



**PAAVAI ENGINEERING COLLEGE**  
**(AUTONOMOUS)**  
**DEPARTMENT OF CHEMICAL ENGINEERING**  
**Minutes of 11<sup>th</sup> Board of Studies Meeting**

**Venue: Online**

**Date and Time: 27.12.2024, 10.00 a.m.**

The 11<sup>th</sup> Board of studies meeting of the Department of Chemical Engineering was held on 27.12.2024 (Friday), at 10.00 am through online, Paavai Engineering College, Pachal.

**Agenda**

➤	Welcome Address
➤	Vision and mission of Institution and Department.
➤	PEOs, POs and PSOs of UG and PG Programme.
➤	Confirmation of the minutes of the 10 <sup>th</sup> Board of studies meeting held on 17.05.2024 and action taken report.
➤	To consider & approve the Curriculum and Syllabus of 3 <sup>rd</sup> and 4 <sup>th</sup> semester B.Tech., Chemical Engineering Programme under Regulations 2023. <ul style="list-style-type: none"><li>• Curriculum, Credits and its structure</li><li>• Syllabus</li><li>• List of Professional Electives</li><li>• List of Open Electives</li><li>• List of One Credit Courses</li><li>• List of Value added courses</li><li>• List of Mandatory courses</li></ul>
➤	To discuss about B.E/B.Tech (Minor in other Specialization)
➤	To discuss and approve Transfer of Credits.
➤	To discuss and approve fast track mode for eligible students.
➤	To discuss and approve Assessment Weightage.





## Minutes of the BoS Meeting

BoS / Chemical 11.1	:	The Board of studies Chairman welcomed the members.
BoS / Chemical 11.2	:	Vision and mission of Institution and Department were described.
APPROVED THE SAME.		
BoS / Chemical 11.3	:	PEOs, POs and PSOs of UG Programme were described.
APPROVED THE SAME.		
BoS / Chemical 11.4	:	The minutes of the 10 <sup>th</sup> Board of Studies meeting held on 17.05.2024 were communicated to the members. The comments received have been incorporated and placed for confirmation. The same was approved by the committee members.
APPROVED THE SAME.		
BoS / Chemical 11.5	:	To consider & approve the Curriculum, Curriculum Structure, Syllabi & Course Outcomes of Professional Elective courses (Verticals I to III) for B.Tech., Chemical Engineering Programme (CBCS) to be offered under Regulations 2023 with effect from the Academic Year 2024-2025 onwards.
Suggestions given by the members regarding UG syllabus:		
<u>Vertical -I Petroleum Process Technology</u>		
1.	<b>CM23152 : PETROLEUM REFINING - I</b>	
	<ul style="list-style-type: none"> <li>Recommended to replace the II unit as crude processing and III unit as Testing to form the sequence.</li> </ul>	
2.	<b>CH23155 : PETROLEUM CORROSION TECHNOLOGY</b>	
	<ul style="list-style-type: none"> <li>Suggested to give suitable unit headings to all the 5 units.</li> </ul>	
3.	<b>CH23156 : POLYMER TECHNOLOGY</b>	



<ul style="list-style-type: none"> <li>Suggested to change the unit title for the III unit.</li> <li>Recommended to increase the unit wise contents for the prescribed hours.</li> </ul>	
4.	<b>CM23157: FERTILIZER TECHNOLOGY</b>
<ul style="list-style-type: none"> <li>Suggested to take the subject Safety in Petrochemical industries instead of this course.</li> </ul>	
<b>GENERAL COMMENTS</b>	
<ul style="list-style-type: none"> <li>Suggested to ensure the suitable Blooms taxonomy action verbs for the course objectives and outcomes.</li> <li>Suggested to ensure the correctness of CO and PO mapping.</li> </ul>	
<b><u>Vertical –II Environmental and Safety Engineering</u></b>	
1.	<b>CM23251 : AIR POLLUTION ENGINEERING</b>
<ul style="list-style-type: none"> <li>Suggested to replace unit IV as Air pollution modelling and unit V as Air pollution control.</li> <li>Recommended to modify the Unit III heading appropriately.</li> </ul>	
2.	<b>CM23252 : WASTEWATER TREATMENT</b>
<ul style="list-style-type: none"> <li>Recommended to increase the unit wise contents for the prescribed hours.</li> </ul>	
3.	<b>CH23253 : SOLID WASTE MANAGEMENT</b>
<ul style="list-style-type: none"> <li>Recommended to include the incineration topic in unit-V.</li> </ul>	
4.	<b>CH23256 : RISK AND HAZOP ANALYSIS</b>
<ul style="list-style-type: none"> <li>Suggested to modify the appropriate course heading.</li> </ul>	
<b><u>Vertical –III Biochemical Engineering</u></b>	
<b>GENERAL COMMENTS</b>	
<ul style="list-style-type: none"> <li>Recommended to reframe the courses and syllabi appropriately.</li> </ul>	
BoS / Chemical 11.6	: Discussed and got approved about B.E/B.Tech (Minor in other Specialization)
BoS / Chemical 11.7	: Discussed and got approved about Transfer of Credits for NPTEL Courses.





BoS / Chemical 11.8	:	Discussed and got approved about fast track mode for eligible students.
BoS / Chemical 11.9	:	Discussed and got approved about Assessment Weightage.

The above suggestions were given by the members and approved the Curriculum, Curriculum Structure, Syllabi & Course Outcomes of Professional Elective courses (Verticals I to III) for UG under R2023 for the students admitted in the year 2024-2025.

Position in the committee	Chairman	University Nominee	Academic Expert	Academic Expert	Industry Expert	Alumni
Name & Designation	Mr. R. Bala subramani Associate Professor & Head, Department of Chemical Engineering	Dr. M. Helen Kalavathy Associate Professor / Chemical Engineering	Dr. M. Arivazhagan Professor & Head, Department of Chemical Engineering	Dr. I. Ganesh moorthy Associate Professor (SG), Department of Chemical Engineering	Mr. D. Senthil kumar, Deputy General Manager, Manali Petrochemicals Ltd., Chennai	Mr. V. Purusothaman, Production Executive, Manali Petrochemicals Ltd., Chennai
Signature						



**PAAVAI ENGINEERING COLLEGE**

**(AUTONOMOUS)**

**DEPARTMENT OF FOOD TECHNOLOGY**

**MINUTES OF THE 8<sup>th</sup> BOARD OF STUDIES MEETING**

**Venue: Microsoft teams**

**Date & Time: 23.12.2024, 02.30 - 03.30 PM**

The 8<sup>th</sup> Board of studies meeting of the Department of Food Technology was held on 23.12.2024 (Monday), at 2.30 - 3.30 PM through online mode via Microsoft teams in Paavai Engineering College, Pachal. The following members were present in the meeting.

S. No	Name	Designation	Position in the Committee	College / University / Industry
1	Dr. S. Kailash	Professor & Head / Food Technology	Chairman	Paavai Engineering College, Namakkal.
2	Dr. R. Brindha	Assistant Professor (Sr. Gr.) / Biotechnology	University Nominee	Anna University, Trichy.
3	Dr. Reya Issac	Associate Professor/ Biotechnology	Academic Expert 1	Karunya University Coimbatore.
4	Dr. R. Parimalavalli	Associate Professor/ Department of Food Science, Technology and Nutrition	Academic Expert 2	Periyar University, Salem
5	Mr. M. Tamilselvan	Sr. Executive – HR.	Industry Expert	Hindustan Foods Limited, Coimbatore
6	Ms. A. Nandhini	Vendor Quality Assurance Trainee	Alumni	Jubilant Food Works Limited, Bengaluru
	Mr. M.D.S. Rajaruban	AP/FT	Members	Paavai Engineering College, Namakkal.
	Mr. S. Gowthamkumar	AP/FT		
	Mr. P. Elanchezhian	AP/FT		
	Ms. S. Pragathi	AP/FT		
	Mr. K. Naveen Kanth	AP/FT		
	Ms. D. Kanishka	AP/FT		
	Mr. S. Praveenkumar	AP/FT		
	Ms. S. Madhumitha	AP/FT		





## AGENDA

- The Chairman, Board of Studies welcomed the members.
- Confirmation of the minutes of the 8<sup>th</sup> Board of studies meeting held on 23.12.2024 and action taken report.
- Presentation of Curriculum and syllabus of 4<sup>th</sup> semester and Professional Electives (Verticals 1, 2 and 3) of B. Tech Food Technology Programme under Regulation 2023.
  - Stake Holder Feed Back
  - Syllabus Review Committee (SRC)
  - Department Advisory Committee (DAC)
  - Curriculum and syllabus of 4<sup>th</sup> semester and Professional Electives (Verticals-1,2,3) of UG Programme under R2023.
  - Examination Patterns.
  - NPTEL Course
  - Fast track
  - Any other items proposed as agenda, related to the Board of studies.

**BoS / Food 8.1** : The Board of studies Chairman welcomed the members.

**BoS / Food 8.2** : The minutes of the 8<sup>th</sup> Board of Studies meeting held on 23.12.2024 were communicated to the members. The comments received have been incorporated and placed for confirmation. The same was approved by the committee members.

**BoS / Food 8.3** : To consider & approve the Curriculum, Curriculum Structure & Syllabi of Vertical 1, 2 and 3 for B.Tech. – Food Technology programme (CBCS) to be offered under R-2023 with effect from the Academic Year 2024-2025 onwards.

### Suggestions given by the members

#### 1. FT23151 - Meat Fish Poultry Processing Technology

- In Unit 3, Fish- Characteristics of fresh fish, Fish products like Fish muscle protein, Surimi production, fish mince products, fish sauce and paste can be

Approved  
BOARD OF STUDIES

Food Technology

S. V. J. S.

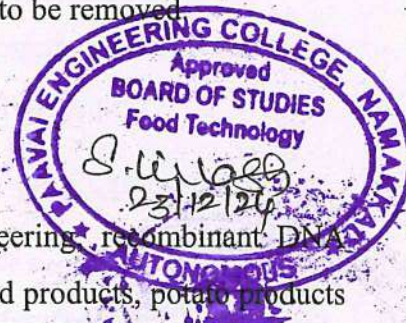
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- Food safety measure GMP and GHP is already in Food Safety Paper so the topics can be removed.



- The following Reference Book can be used for the above suggested topics.  
D.P.Sen, 2005 - Advances in Fish Processing Technology Preservation of fish and meat, 2004
2. **FT23152 - Cold Chain Techniques**
    - Give equal weightage to all units
  3. **FT23153 - Technology of Cereals, Pulses and Oilseeds**
    - No pulses content in any Unit, no objective with reference to pulses
    - In unit 1 specify the types of Millets
    - In unit-5, include Soyabean, Tofu, Temph, Peanut- butter and curd
  4. **FT23154 - Fat and Oil Processing Technology**
    - Unit -1: Crude vegetable oil, Virgin oil, Cold Pressed oil extraction process can be included.
    - Unit - IV: Reused oil can be included
    - Unit – V: Functional foods- specify the functional food
  5. **FT23155 - Plantation and spices Product Technology**
    - In Unit – I the topics of coconut processing and byproducts, cashew nut and oil palm processing, Processing of tuber crops - tapioca need to be removed.
    - In Unit – II to remove the content, Direct contact heater (DCH), plate heater (PHE), advantages and disadvantages, Evaporator specifically types and performance measures.
  6. **FT23157 - Food Plant and Process Equipment Design**
    - Whole content in heavy, need to minimize.
  7. **FT23252 - Food Phytochemicals**
    - In Unit - 1 has to be removed - Dietary patterns rich in phytochemicals, Phytochemicals in Functional Foods, Introduction to functional foods and their role in health promotion, Examples of phytochemical - rich functional foods and beverages.
    - In Unit 2 - Anticancer Properties are suggested to be removed
    - In Unit 3 - Impact of phytochemicals are suggested to be removed
  8. **FT23254 - Genetically Modified Foods**
    - Whole content in heavy, need to minimize.
  9. **FT23256 - Enzyme in Food Processing**
    - In Unit – 1 the topic GMO and protein engineering, recombinant DNA technology and Applications specifically cereal food products, potato products and coffee need to be removed.





- Unit – 3 “Enzyme in bread and non-bread making”- to remove the topic Enzymatic effects on pasta and noodles, application of enzymes in different food products, Enzymatic effects on pasta and noodles.

#### **10. FT23351 - Meat Processing Technology**

- Unit 1- Introduction – the topic Different types of slaughtering methods to be removed.
- Unit 2 - Slaughtering and Cutting topic to be minimized.
- It was suggested to remove the content poultry slaughter house building, facility requirements and food production from halal perspective.

#### **11. FT23504 - Food Safety, Quality and Regulation**

- In Unit -5, include Standards for foods- cereals, pulses, honey and sugar, vegetables and meat products.

#### **12. FT23403 – Food Additives**

- Functions of Food Additives, Major additives used in Food Processing can be included

### **Curriculum changes:**

#### **1. FT20153 - Food Additives**

- The subject FT23403 - Post Harvest Engineering has to be removed and the subject Food Additives has been suggested for the 4<sup>th</sup> semester.
- As the Topic Post harvesting and food spoilage has also been studied in the subject Fruits and vegetable processing technology.

#### **2. FT20701 - Food Safety, Quality and regulation**

- Replacing the subject FT23701 - Food Safety Regulation by FT20651 – Food supply chain management in the 7<sup>th</sup> semester and Replacing Food Safety Regulation by Food Additives to the 5<sup>th</sup> semester.

#### **3. NPTEL Courses:**

- Choose the NPTEL courses for Domain papers not for Professional Electives.
- Encourage the students to Complete NPTEL courses (12-weeks) to gain exposure from IIT faculty members

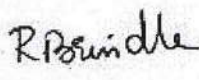

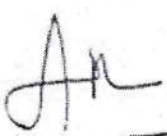
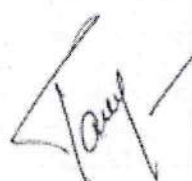

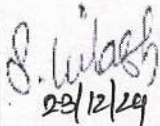
#### **4. CO & PO Mapping:**

- Remove the Remembering level course outcome and include Apply level for undergraduate paper.





**RESOLVED AND APPROVED THE SAME.**

Position in the committee	University Nominee	Academic Expert 1	Academic Expert 2	Industry Expert	Alumni	Chairman
Name & Designation	Dr. R. Brindha Assistant Professor (Sr. Gr.)/ Biotechnology	Dr. Reya Issac Associate Professor/ Department of Biotechnology	Dr. R. Parimalavalli Associate Professor/ Department of Food Science, Technology and Nutrition	Mr. M. Tamilselvan Sr. Executive – HR.	Ms. A. Nandhini Vendor Quality Assurance Trainee	Dr. S. Kailash Professor & Head /Food Technology
Signature						 23/12/24





**PAAVAI ENGINEERING COLLEGE (Autonomous)**  
**DEPARTMENT OF INFORMATION TECHNOLOGY**

**Minutes of 11<sup>th</sup> Board of Studies Meeting**

**Date and Time: 27.12.2024, 10.00 AM – Online Mode**

The 11<sup>th</sup> Board of Studies meeting of the Department of Information Technology was held on 27.12.2024 (Friday), at 10.00 am through Online Mode, at Paavai Engineering College. The following members were present for the meeting.

S.NO	NAME & DESIGNATION	POSITION IN COMMITTEE	COLLEGE/UNIVERSITY /INDUSTRY
1	Dr.B.Venkatesan HOD & Associate Professor / IT	Chairman	Paavai Engineering College
2	Dr.K.Sathya priya, Associate Professor / CSE	University Nominee	PSG College of Technology, Coimbatore.
3	Dr.S.Prabu, Associate Professor	Academic Expert	Pondicherry University, Pondicherry
4	Dr.S.SriVidhya, Professor& Head / ISE	Academic Expert	BNM Institute of Technology, Bangalore.
5	Mr.A.Kishore Chowdary, CEO	Industry Expert	Cloudbeaver Technologies Private Limited, Hosur
6	Mr.H.Raghul, Professional I System Administrator	Alumni	DXC Technologies, Bangalore
7	Dr.G.Madasamy Raja Associate Professor	Member	Paavai Engineering College
8	Mr.S.Rajesh Associate Professor	Member	Paavai Engineering College
9	Mrs.M.Pushpalatha Associate Professor	Member	Paavai Engineering College
10	Mrs.M.Janani Assistant Professor	Member	Paavai Engineering College
11	Mrs.M.Babylatha Assistant Professor	Member	Paavai Engineering College
12	Mrs.M.Saranya Assistant Professor	Member	Paavai Engineering College



13	Mr.S.Saravana kumar Assistant Professor	Member	Paavai Engineering College
14	Mrs.B.Deepa Assistant Professor	Member	Paavai Engineering College
15	Dr.M.Sathish kumar Professor/Maths	Member	Paavai Engineering College

### Agenda

- The Chairman, Board of Studies welcomed the members.
- Confirmation of the minutes of the 10<sup>th</sup> Board of studies meeting held on 18.05.2024 and action taken report.
- Presentation of Curriculum and Syllabus of 4<sup>th</sup> semester B.Tech. Information Technology Programme under Regulations 2023.
  - Curriculum, Credits and its structure
  - Syllabus
  - List of Professional Electives(VERTICALS)
  - List of Open Electives
  - List of Value-added courses
  - List of Mandatory courses

**BoS / IT 11.1** : The Board of studies Chairman welcomed the members.

**BoS / IT 11.2** : The minutes of the 10<sup>th</sup> Board of Studies meeting held on 18.05.2024 were communicated to the members. The comments received have been incorporated and placed for confirmation. The same was approved by the committee members.

**BoS/IT 11.3** : **To consider & approve the Curriculum, Curriculum Structure & Syllabi of IV<sup>th</sup> semester for B.Tech. – Information Technology (CBCS) to be offered under R-2023 with effect from the Academic Year 2023-2024 onwards.**

**Suggestions given by the members regarding UG syllabus**

#### 1. Vertical – I (Data Analysis)

- Ensure that the syllabus contents should not be overlapped between 'Computer Vision' and 'Image and Video Analytics'.
- 'Data Virtualization' can be moved to Vertical-III (Data Center Technologies)





## 2. Vertical – II (Software Development)

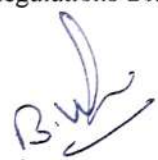
- 'R Programming' may be moved to Value Added Course, instead the subject 'Speech Processing' can be included.

## 3. Vertical - III – (Data Center Technologies)

- 'Data Visualization' can be moved to Vertical- I (Data Analysis).
- A student can be exempted from a professional elective course (verticals) provided that they have completed an NPTEL course with the similar syllabus.
- As a general suggestion, all the text books prescribed in the syllabus must be chosen from the latest edition, possibly it should be with in last five years.

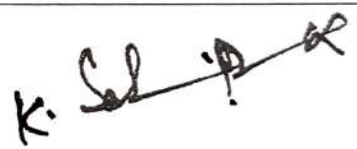
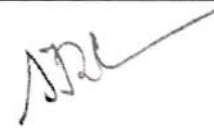


### **RESOLVED AND APPROVED THE SAME.**

The above suggestions were given by the members and approved the Curriculum under Regulations 2023 for 4<sup>th</sup> semester syllabi for the students admitted in the year 2023-2024 under Regulations 2023, open electives, verticals, value added courses, mandatory courses and panel of examiners.

  
Chairman

Dr. B.Venkatesan

HoD and Associate Professor/ IT

Position in the committee	Name & Designation	e-Signature
University Nominee	Dr.K.Sathya priya, Associate Professor / CSE	
Academic Expert 1	Dr.S.Prabu, Associate Professor	
Academic Expert 2	Dr.S.SriVidhya, Professor& Head / ISE	
Industry Expert	Mr.A.Kishore Chowdary, CEO	ABSENT
Alumunus	Mr.H.Raghul, Professional I System Administrator	



**PAAVAI ENGINEERING COLLEGE  
(AUTONOMOUS)  
DEPARTMENT OF PHARMACEUTICAL TECHNOLOGY  
MINUTES OF THE EIGHTH BOARD OF STUDIES MEETING  
27.12.2024 & 02:30 PM**

**AGENDA**

1. To discuss and approve the syllabus for verticals I, II and III under Regulations 2023 (for the students admitted during the academic year 2024-2025).
2. To discuss and approve the one credit courses.
3. To discuss and approve the Value-Added Courses.
4. Panel of Examiners


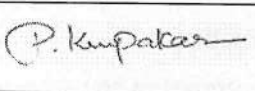
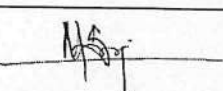
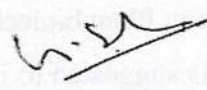
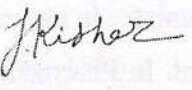
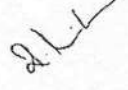
**Suggestions by the members**

- Dr.S.Latha, University nominee suggested the following:
  - To remove the subject 'Metabolic Engineering and Novel Drug carriers' and to introduce subjects like 'Artificial Intelligence and Machine Learning for Drug Design, Drug Discovery and High Throughput Screening, Computational Chemistry' in *Vertical I: Drug Discovery and Design*. The panel suggested to include AI ML based subtopics in Bioinformatics and Cheminformatics.
  - Rename the *Vertical II* title as "*Advanced Drug Delivery and Formulation*"; In *Vertical II* remove the following subjects Manufacturing Technology of Dosage Forms, Novel Drug Delivery Systems, Regulatory Consideration for Formulation Development; and introduce the following subjects 'Process Analytical Technology and Continuous manufacturing'.
  - In *Vertical III: Natural and Sustainable Therapeutics*, include the subjects 'Green Chemistry in natural drug development, Plant biotechnology in drug development. In Pharmacognosy subject it is suggested to include network pharmacology, computational technique, formulation, and bioassay.
  - Club the Nano-Formulation of Drugs and Novel Drug Delivery Systems into a single subject.
- Dr. Krupakar Parthasarathy insisted including the subtopic source of protein in Unit 1 of Protein Structure, Function and Proteomics
- Dr. Suresh Govindan suggested to include topics about plant metabolites in Metabolic Engineering; For Novel drug carriers suggested to have a lab to work on chitosan-based drug carrier system and encourage students to work on encapsulation-based works for drug delivery; He provided an open opportunity for internship in his firm for 2-4 weeks to understand the ayurvedic formulation. He



also suggested taking students for field to Alagappa University, Karaikudi or Anna University BIT Campus, Trichy to practically update students skills about Molecular modelling and simulations. He also shared the details about drug development and drug discovery platform provided for final year students at Kalasalingam University.

- The panel requested to update the students through training about the Clinical research, regulatory licensing, internships and online NPTEL/SWAYAM courses.
- The above suggestions were given by the members and approved the Curriculum and syllabi for the vertical I, II and III of 2024-2025 admitted students of Regulations 2023 (CBCS), one credit courses, value added courses and panel of examiners.

Position in the BOS committee	University Nominee	Academic Expert 1	Academic Expert 2
<b>Name &amp; Designation</b>	Dr. S. Latha Associate Professor / Pharmaceutical Technology, Anna University	Dr. Krupakar Parthasarathy Associate Professor/CDDD	Dr. M.Swamivelmanickam Associate Professor/ Department of Pharmacy
<b>Signature</b>			
Position in the BOS committee	Industry Expert	Alumni	Chairman
<b>Name &amp; Designation</b>	Dr. Suresh Govindan Research Head	Mr. J. Kishore Clinical Data Coordinator II	Dr. R. Praveen Kumar Professor & Head /Pharmaceutical Technology
<b>Signature</b>			



**PAAVAI ENGINEERING COLLEGE**  
**(Autonomous)**  
**Department of Science and Humanities**

**Minutes of 11<sup>th</sup> Board of Studies Meeting**

**Venue: Hybrid Mode**

**Date and Time: 21.12.2024, 11.00 a.m.**

The 11<sup>th</sup> Board of studies meeting of Science and Humanities was held on 21.12.2024, at 11.00 am through Hybrid mode, Paavai Engineering College, Pachal. The following members were present in the meeting.

S.No	Name	Designation	Position in the Committee	College / University / Industry
1.	Dr.M.Sathish Kumar	HOD & Professor/Maths	Chairman	Paavai Engineering College
2.	Dr.K.Sivakumaran	Professor / Physics,	University Nominee	PSG College of Technology, Coimbatore
3.	Dr.G.Murugasundaramoorthy	Professor /Maths	Academic Expert	Vellore Institute of Technology, Vellore
4.	Dr.K.Sundaramoorthy	HOD / IQAC	Special Invitee	Paavai Engineering College
5.	Dr.T. Krishnakumar	Professor & HOD / Physics	Member	Paavai Engineering College
6.	Dr.R.Shanthi	Professor & HOD / English	Member	Paavai Engineering College
7.	Dr.G.Raja	Professor & HOD / Chemistry	Member	Paavai Engineering College
8.	Dr.P.Jayakumar	Professor / Maths	Member	Paavai Engineering College
9.	Dr.B.Kishokkumar	Professor / Maths	Member	Paavai Engineering College
10.	Mrs.K.Uma	ASP/ Maths	Member	Paavai Engineering College
11.	Mrs.R.Pradeepa	ASP/ Maths	Member	Paavai Engineering College
12.	Mrs.C.Manjula	ASP/ Maths	Member	Paavai Engineering College
13.	Mrs.S.Kavitha	Professor / Physics	Member	Paavai Engineering College



## Agenda

- Welcome Address
- Vision and mission of Institution and Department.
- To consider & approve the Syllabus of 4<sup>th</sup> semester syllabus under Regulations 2023 for UG.
- To discuss and approve Assessment Weightage.
- To approve and change the topic in Statistics and Numerical Methods of 4<sup>th</sup> semester under Regulations 2023 for UG.

### **Minutes of the BoS Meeting**

- The Board of studies Chairman welcomed the members.
- Vision and mission of Institution and Department were described.
- To consider & approve the Syllabus of 4<sup>th</sup> semester syllabus under Regulations 2023 for UG.
- Approved the same.

### **Suggestions given by the members regarding syllabus:**

#### **Department of Mathematics**

##### **MA23405 Probability and Statistics with R**

- In unit 1, include Basic concepts of Probability as a review portion and add the distributions topic from unit 2.
- In unit 2, start with Correlation and change the topic Regression equations of 2 components instead of Regression lines.
- In unit 3, add the topic Large sample tests.
- In Lab Component contents, remove the term Applications.
- Update the 9<sup>th</sup> edition for the Reference book - Walpole. R.E., Myers. R.H., Myers. S.L. and Ye. K., "Probability and Statistics for Engineers and Scientists", Pearson Education, Asia, 8<sup>th</sup> Edition, 2007.
- Change 9 hours for unit 1, 10 hours for unit 2, 12 hours for unit 3, 8 hours for unit 4 and 6 hours for unit 5.

##### **MA23401 Statistics and Numerical Methods**

- To change the topic Lagrangian method for unequal intervals instead of Lagrangian method for equal and unequal intervals.

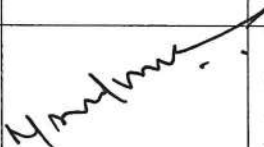
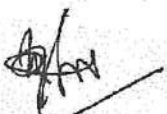
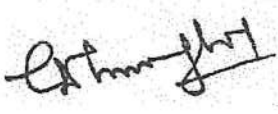
#### **Department of Physics**

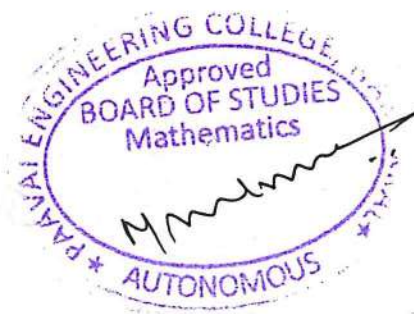
##### **PH23102- Physics for Information Science**

- The amendment made for Physics for Information Science course during 10<sup>th</sup> BOS meeting.
- Based on the amendment the course code is revised for Physics for Information Science course as PH23107 for odd semester and PH23207 for even semester.

## RESOLVED AND APPROVED THE SAME

The above suggestions were given by the members and approved the 4<sup>th</sup> semester syllabi for UG under R2023 for the students admitted in the year 2023-2024, amendment and panel of examiners.

Position in the committee	Chairman	University Nominee	Academic Expert
Name and Designation	HOD, Mathematics	Dr.K.Sivakumaran Professor / Physics, PSG College of Technology, Coimbatore	Dr.G.Murugasundaramoorthy Professor (HAG), Department of Mathematics.Vellore Institute of Technology,Vellore
Signature			





MA23401	STATISTICS AND NUMERICAL METHODS			3	1	0	4
(Common to Civil, Chemical, Mech, MCT, R&A)							
COURSE OBJECTIVES							
To enable the students to							
1.	determine the concepts of hypotheses testing, its need and applications.						
2.	equip with statistical techniques for designing experiments, analyzing, interpreting and presenting research data.						
3.	apply various numerical techniques for solving algebraic/transcendental equations and system of linear equations.						
4.	develop the knowledge of numerical differentiation and numerical integration techniques.						
5.	acquaint the knowledge of various techniques and methods of solving ordinary differential equations.						
UNIT I	TESTING OF HYPOTHESIS						12
Sampling theory; Large sample - Tests for single mean, proportion and difference of means; Small sample - Test for single mean and difference of means; Test equality of variances; Chi square test - Goodness of fit, Independence of attributes.							
UNIT II	DESIGN OF EXPERIMENTS						12
Completely randomized design; Randomized block design; One way and two way classifications- Latin square design - $2^2$ factorial design.							
UNIT III	SOLUTION OF EQUATIONS AND EIGENVALUE PROBLEMS						12
Solution of algebraic and transcendental equations; Fixed point iteration method; Newton Raphson method; Solution of linear system of equations; Gauss elimination method – Pivoting; Gauss Jordan method; Iterative methods of Gauss Jacobi and Gauss Seidel; Eigenvalues of a matrix by Power method and Jacobi's method for symmetric matrices.							
UNIT IV	INTERPOLATION, NUMERICAL DIFFERENTIATION AND NUMERICAL INTEGRATION						12
Interpolations - Newton's forward and backward difference interpolation; Approximation of interpolation polynomials; Divided differences; Lagrangian method for unequal intervals; Numerical differentiation and integration by trapezoidal and Simpson's 1/3 rules.							
UNIT V	NUMERICAL SOLUTION OF ORDINARY DIFFERENTIAL EQUATIONS						12
Single step methods: Taylor's series method; Euler's method, Modified Euler's method; Fourth order Runge-Kutta method for solving first order differential equations; Multi step methods: Milne's and Adams - Bash forth predictor corrector methods for solving first order differential equations.							
						TOTAL PERIODS	60

**COURSE OUTCOMES**

At the end of this course, the students will be able to

		<b>BT MAPPED</b> (Highest Level)
CO1	apply the concept of testing of hypothesis for small and large samples in real life problems	Applying (K3)
CO2	analyse the principles to be adopted for designing the experiments.	Analysing(K4)
CO3	apply various numerical techniques to solve algebraic and transcendental equations.	Applying(K3)
CO4	derive the concepts of numerical differentiation and integration.	Applying (K3)
CO5	compute the solution of first order ordinary differential equations by numerical techniques..	Applying (K3)

**TEXT BOOKS**

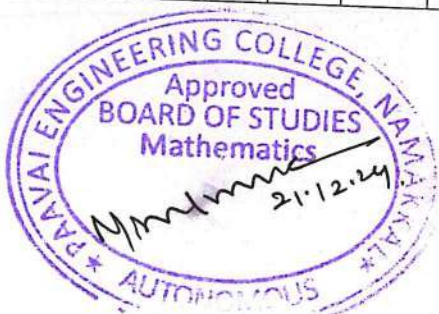
1. Milton. J. S. and Arnold. J.C., "Introduction to Probability and Statistics", Tata McGraw Hill, 4<sup>th</sup> Edition, 2007.
2. Sankar Rao K " Numerical Methods for Scientists and Engineers –3<sup>rd</sup> Edition Princtice Hall of India Private, New Delhi, 2007.

**REFERENCES**

1. Grewal, B.S., and Grewal, J.S., "Numerical Methods in Engineering and Science", Khanna Publishers, 10th Edition, New Delhi, 2015.
2. Gerald. C.F. and Wheatley. P.O. "Applied Numerical Analysis" Pearson Education, Asia, New Delhi, 7<sup>th</sup> Edition, 2007.
3. Spiegel. M.R., Schiller. J. and Srinivasan. R.A., "Schaum's Outlines on Probability and Statistics", Tata McGraw Hill Edition, 4<sup>th</sup> Edition, 2012.
4. Johnson, R.A., Miller, I and Freund J., "Miller and Freund's Probability and Statistics for Engineers", Pearson Education, Asia, 8<sup>th</sup> Edition, 2015.

**CO PO MAPPING:**

Mapping of Course Outcomes with Programme Outcomes (1/2/3 indicates strength of correlation) 3-Strong, 2-Medium,1-Weak														
COs	Programmes Outcomes (POs)													
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3	3	2	3	-	-	-	-	-	-	-	3	-	-
CO2	3	3	2	3	-	-	-	-	-	-	-	3	-	-
CO3	3	3	2	3	-	-	-	-	-	-	-	3	-	-
CO4	2	2	2	2	-	-	-	-	-	-	-	2	-	-
CO5	3	3	2	2	-	-	-	-	-	-	-	2	-	-







# PAAVAI ENGINEERING COLLEGE

(Autonomous Institution)

(Approved by AICTE and Affiliated to Anna University)

(Accredited by National Board of Accreditation, New Delhi & NAAC (UGC) with 'A' Grade)

Paavai Nagar, NH - 7, PACHAL, NAMAKKAL - 637 018. Tamil Nadu

☎ 04286-243038, 58,88 & 98 Fax: 04286-243068 Email: pecprincipal@paavai.edu.in website: <http://pec.paavai.edu.in>

## DEPARTMENT OF MANAGEMENT STUDIES

### Minutes of 10<sup>th</sup> Board of Studies Meeting

Venue: CUTE HALL

Date and Time: 16.12.2024, 10.00 a.m.

The 10<sup>th</sup> Board of studies meeting of the Department of Management Studies was held on 16.12.2024 (Monday), at 10.00 am in Cute Hall, Main Building, Paavai Engineering College, Pachal. The following members were present for the meeting.

S.No	Name	Designation	Position in the Committee	College / University / Industry
1.	Dr. T. Kalaiselvi	Director / MBA	Chairman	Paavai Engineering College, Namakkal.
2.	Dr.-K. R. Mahalaxmi,	Associate Professor/MBA	University Nominee	Anna University, Trichy
3.	Dr.Sabat Kalicharan,	Director - BBA Programme	Academic Expert	R V University, Bangalore.
4.	Dr. Rajesh Mamilla	Professor & Hod Finance, Accounts and Economics Division,	Academic Expert	Vellore Institute of Technology, Chennai.
5.	Mr. Dhinesh Khanna Ramalingam	Global Head Customer Support.	Industry Expert	Zoho Corporation, Chennai.
6.	Mr. Anish K Chacko	Business Dealer	Alumini	Nippon Paint, Namakkal.
7.	Dr.K.Selvi	Dean Academics	Special Invitee	Paavai Engineering College
8.	Mr. R. Thamarai Selvan	ASP/MBA	Members	Paavai Engineering College
9.	Mrs. M. Bharani Eswari	AP/MBA		
10.	Ms. A. Sheela	AP/MBA		
11.	Mrs. S. Megalatha	AP/MBA		
12.	Mrs. S. Subha	AP/MBA		
13.	Mrs. G. Ishwaraya	AP/MBA		

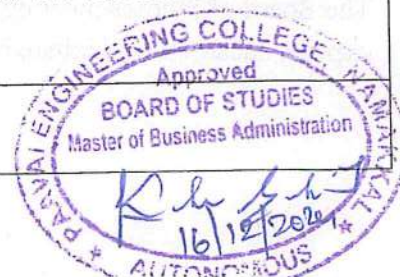




➤	Welcome Address
➤	Vision and Mission of Institution and Department.
➤	PEOs, POs and PSOs of PG Programme.
➤	Confirmation of the minutes of the 9 <sup>th</sup> Board of studies meeting held on 26.04.2024 and action taken report.
➤	To consider & approve the Curriculum and Syllabi of 2 <sup>nd</sup> Semester for the academic year (2023-2024) and 4 <sup>th</sup> semester for the academic year (2024 - 2025) MBA Programme under Regulations 2023. <ul style="list-style-type: none"> <li>• Curriculum, Credits and its structure</li> <li>• Syllabus</li> <li>• Industry Oriented Courses</li> </ul>
➤	To discuss and approve Assessment Weightage.
➤	Any other items relevant to the board of studies.

The BOS Meeting with the valuable inputs from industry and academic experts helped to include topics relevant to the industry and to make the student industry ready.

BoS / MBA 10.1	:	The Board of studies Chairman welcomed the members.
BoS / MBA 10.2	:	Vision and Mission of Institution and Department were presented.
<b>APPROVED THE SAME.</b>		
BoS / MBA 10.3	:	PEOs, POs and PSOs of PG Programme were presented.
<b>APPROVED THE SAME.</b>		
BoS / MBA 10.4	:	The minutes of the 9 <sup>th</sup> Board of Studies meeting held on 26.04.2024 were communicated to the members. The comments received have been incorporated and placed for confirmation. The same was approved by the committee members.
<b>APPROVED THE SAME.</b>		
BoS / MBA 10.5	:	To consider & approve the Curriculum Structure, Syllabi & Course Outcomes of II & IV semesters for M.B.A (CBCS) to be offered under Regulations 2023 with effect from the Academic Year 2024-2025 onwards.
Suggestions given by the members regarding syllabus:		











	<b><u>Semester – II</u></b>
<b>1. <u>BA23201 – Production and Operations Management</u></b>	
<ul style="list-style-type: none"> <li>• ERP Model to be included in Unit – IV</li> <li>• ERP Software and AD Project reports</li> <li>• Updated versions of text book should be included.</li> </ul>	
<b>RESOLVED AND APPROVED THE SAME.</b>	
<b>2. <u>BA23202 – Financial Management</u></b>	
<ul style="list-style-type: none"> <li>• ‘Overview of Financial Management in India’ was added in the Course Objectives.</li> <li>• Topic “Sources of finance” to be included in Unit – II</li> <li>• Topic Decision Tree Analysis to be included in Unit – III</li> <li>• “Financial Planning and strategy” to be removed in Unit – IV</li> <li>• “Inventory control techniques” to be included in Unit - V</li> </ul>	
<b>RESOLVED AND APPROVED THE SAME.</b>	
<b>3. <u>BA23203 – Marketing Management</u></b>	
<ul style="list-style-type: none"> <li>• The unit was retitled as Marketing Research and Marketing Mix</li> <li>• To be included on Online Marketing, E-commerce and Model, E- Business, Marketing Research and Mix in Unit – V</li> </ul>	
<b>RESOLVED AND APPROVED THE SAME.</b>	
<b>4. <u>BA23204 – Human Resource Management</u></b>	
<ul style="list-style-type: none"> <li>• Topics HRIS and HRM to be included in Unit – I</li> <li>• Topics Training to be included in Unit – III</li> <li>• Topics like Motivation, Reward, Compensation, Job Satisfaction, Employee Engagement to be included in Unit - IV</li> </ul>	
<b>RESOLVED AND APPROVED THE SAME.</b>	

- Transfer of 3 credits is permitted if the student completes two NPTEL courses.
- The **industry-oriented courses** offered by the department were highly appreciated by the **Anna University Nominee** for their continuous efforts in promoting academic excellence and industry collaboration.
- **Zoho Corporation** has volunteered to offer **Customer Relationship Management (CRM)** courses for students and **training for faculty members**
- The Board of Studies meeting, enriched with valuable inputs from both industry and academic experts, successfully included relevant topics to make the students **industry-ready**.



The above suggestions were given by the members and they approved revised curriculum for PG Programme of Regulation 2023 and finalize the courses in II Semester.

Position in the Committee	Chairman	University Nominee	Academic Expert 1	Academic Expert 2	Industry Expert	Alumni Representative
Name & Designation	Dr.T.Kalaiselvi, Director/MBA Department of Management Studies, Paavai Engineering College, Namakkal	Dr. K. R. Mahalaxmi Assistant Professor, Department of Management Studies, UCE – BIT Campus Anna University, Tiruchirappalli	Dr. Rajesh Mamilla, Professor & Hod Finance, Accounts and Economics Division, Vellore Institute of Technology, Chennai	Dr.Sabat Kalicharan, Associate Professor, Director – BBA, R V University, Bangalore	Mr. Dhimesh Khanna Ramalingam, Global Head Customer Support, Zoho Corporation, Chennai	Mr. Anish K Chacko, Businessman, Nippon Paints, Namakkal
Signature						





# PAAVAI ENGINEERING COLLEGE

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Paavai Nagar, NH - 7, PACHAL, NAMAKKAL - 637 018. Tamil Nadu

☎ 04286-243038, 58.88 & 98 Fax: 04286-243068 Email: pecprincipal@paavai.edu.in website: http://pec.paavai.edu.in

## MASTER OF COMPUTER APPLICATIONS

Minutes of the 10<sup>th</sup> Board of Studies Meeting - Online Mode

DATE & TIME: 28.12.2024 & 02.30 PM

The following members were present in 10<sup>th</sup> Board of Studies Meeting.

S. No	Name	Designation	Position In Committee	College/ University/Industry	Signature With Date
1	Dr.P.Muthusamy	HOD/MCA	Chairman	Paavai Engineering College	<i>P. Muthusamy</i> 28/12/24
2	Dr. M.Sivakumar	Associate Professor/CSE	University Nominee	Thiagarajar College of Engineering, Madurai	<i>M. Sivakumar</i>
3	Dr. J.B.Jona	Associate Professor /MCA	Academic Expert	Coimbatore Institute of Technology, Coimbatore.	<i>J.B. Jona</i>
4	Dr. T.Manikandan	Professor/CSE	Academic Expert	Rajalakshmi Engineering College, Chennai	<i>T. Manikandan</i>
5	Mrs.M.Sasirekha	Software Engineer	Industry Expert	TCS, Chennai	<i>M. Sasirekha</i>
6	Ms.M.Kanimozhi	Web Developer	Alumni	Mallow Technology, Chennai	<i>M. Kanimozhi</i>
7	Mr.S.Senthilvelan	Professor /MCA	Members	Paavai Engineering College.	<i>S. Senthilvelan</i> 28/12/24
8	Dr.V.Annapoorani	Professor /MCA			<i>V. Annapoorani</i> 28/12/24
9	Mr.C.Rathnakumar	Associate Professor /MCA			<i>C. Rathnakumar</i> 28/12/24
10	Mrs.M.Geetha	Associate Professor /MCA			<i>M. Geetha</i> 28/12/24
11	Mrs.M.Maheswari	Assistant Professor/MCA			<i>M. Maheswari</i> 28/12/24
12	Mrs.R.Deepika	Assistant Professor/MCA			<i>R. Deepika</i> 28/12/24



## Agenda

➤	Welcome Address
➤	Vision and mission of Institution and Department.
➤	PEOs, POs and PSOs of PG Programme.
➤	Confirmation of the minutes of the 9 <sup>th</sup> Board of Studies meeting held on 11.05.2024 and Action Taken Report.
➤	To consider & approve the Curriculum and Syllabus of 2 <sup>nd</sup> semester M.C.A Programme under Regulations 2023. <ul style="list-style-type: none"> <li>• Curriculum, Credits and its structure</li> <li>• List of II Semester Courses and Syllabus</li> <li>• List of Professional Electives</li> <li>• Amendments</li> </ul>
➤	To consider & approve the Curriculum Structure and Syllabi of II semester M.C.A Programme under Regulations 2023.
➤	To discuss and approve Assessment Weightage.
➤	Any other points relevant to the board of studies.

## Minutes of the BoS Meeting

BoS / MCA 10.1	:	The Board of studies Chairman welcomed the members.
BoS / MCA 10.2	:	Vision and mission of Institution and Department were described.
<b>APPROVED THE SAME.</b>		
BoS / MCA 10.3	:	PEOs, POs and PSOs of PG Programme were described.
<b>APPROVED THE SAME.</b>		
BoS / MCA 10.4	:	The minutes of the 9 <sup>th</sup> Board of Studies meeting held on 11.05.2024 were communicated to the members. The comments received have been incorporated and placed for confirmation. The same was approved by the committee members.
<b>APPROVED THE SAME.</b>		
BoS / MCA 10.5	:	To consider & approve the Curriculum, Curriculum Structure,





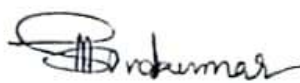
	Syllabi & Course Outcomes of II semesters for M.C.A to be offered under Regulations 2023 with effect from the Academic Year 2024-2025 onwards.
Suggestions given by the members regarding PG syllabus:	
<b><u>Semester –II</u></b>	
1.	<b><u>CA23201 : INTERNET OF THINGS</u></b>
	<ul style="list-style-type: none"> <li>Change the title of Unit III to Scheduling Governance in the Internet of Things and include the topic IIOT in the Unit IV</li> </ul>
2.	<b><u>CA23203 : ADVANCED DATABASE MANAGEMENT SYSTEMS</u></b>
	<ul style="list-style-type: none"> <li>The course title renamed Database Management Systems instead of Advanced Database Management Systems</li> <li>Rearrange the unit as Introduction to Database System, SQL and PL/SQL, Distributed Databases, Spatial and Temporal Databases and NOSQL Databases.</li> </ul>
3.	<b><u>CA23206 : ADVANCED DBMS LABORATORY</u></b>
	<ul style="list-style-type: none"> <li>The course title renamed DBMS Laboratory instead of Advanced DBMS Laboratory</li> <li>Rearrange the Experiment as DDL Commands, DML Commands, Set Operations, PL/SQL Operations, PL/SQL Exception, NOSQL Commands, MySQL Database, MySQL Replication, Spatial Data Storage and Temporal Data Storage.</li> </ul>
4.	<b><u>PROFESSIONAL ELECTIVE I</u></b>
	<ul style="list-style-type: none"> <li>Rearrange the Web Design Course unit as Introduction to WWW, UI Design, Java Script, Advanced UI with CSS and Server Side Programming with PHP.</li> <li>Simplify the Unit V in the Course Information Security.</li> <li>Name the title of Unit III in the course Mobile Application Development as Memory Management.</li> </ul>
<b>RESOLVED AND APPROVED THE SAME.</b>	

The above suggestions were given by the members and approved the 2<sup>nd</sup> semester syllabi for MCA under R2023 for the students admitted in the year 2024 – 2025 onwards.

The above suggestions given by the members

  
Dr. P. Muthusamy

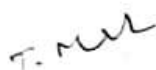
Chairman BoS

  
Dr. M. Sivakumar

University Nominee

  
Dr. J.B. Jona

Academic Expert



Dr. T. Manikandan

Academic Expert



Mrs. M. Sasirekha

Academic Expert



Ms. M. Kanimozhi

Alumni

