BMS INSTITUTE OF TECHNOLOGY AND MANAGEMENT

Avalahalli, Doddaballapur Main Road,

Bengaluru – 560064

PBL COMPENDIUM

2022-23

ODD SEMESTER

INDEX SHEET

SL.NO	DEPARTMENT	PAGE.NO
1	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING	6-10
2	COMPUTER SCIENCE AND ENGINEERING	11-16
3	CIVIL ENGINEERING	17-23
4	ELECTRONICS AND COMMUNICATION ENGINEERING	24-28
5	ELECTRICAL AND ELECTRONICS ENGINEERING	29-33
6	ELECTRONICS AND TELECOMMUNICATION ENGINEERING	34-36
7	MECHANICAL ENGINEERING	37-41
8	INFORMATION SCIENCE AND ENGINEERING	42-47

PBL COMMITTEE MEMBERS

Sl.NO	Name	Department
1	Dr.Mohanbabu G N	Principal
2	Dr. H K Govindaraju	Vice-Principal
3	Dr. Anil G N	Dean-Academics
4	Dr. Ambika R	PBL-Coordinator, Institute Level
5	Dr. Radhika K R	PBL-Coordinator, Institute Level
6	Dr. Prashanth A	PBL-Coordinator, EEE
7	Mr. Sundaresh	PBL-Coordinator, ME
8	Dr. Anitha V R	PBL-Coordinator, ECE
9	Mr. Shivarudraiah B	PBL-Coordinator, ECE
10	Mrs. Saritha I G	PBL-Coordinator, ETE
11	Dr. Manoj H M	PBL-Coordinator, CSE
12	Dr. Drakshaveni	PBL-Coordinator, ISE
13	Dr. Anil kumar	PBL-Coordinator, ISE
14	Mr. Ravikumar B N	PBL-Coordinator, ISE
15	Mr. Deepak	PBL-Coordinator, CIV
16	Dr. Anupama H S	PBL-Coordinator, AI&ML

TOTAL NUMBER OF PBL PROJECTS

Department	No. of projects in III semester	No. of projects in V semester	Total Department wise	
CSE	54	60	114	
ISE	60	60	120	
ECE	48	54	102	**TOTAL-464**
ME	7	15	22	
CV	7	13	20	
EEE	12	14	26	
ETE	15	14	29	
AI & ML	14	17	31	

RUBRICS FOR PBL EVALUATION

I PHASE EVALUATION

Problem Formulation and Synopsis	10M	
Objectives and Methodology	10M	**Total: 50Marks**
Presentation Skills	20M	
Viva	10M	

II PHASE EVALUATION

Implementation	20 Marks	
Presentation	20 Marks	**Total 50 Marks**
Viva	10 Marks	

DEPARTMENT OF ARTIFICIAL INTELLIGENCE

AND

MACHINE LEARNING

PBL Report

The open Day was conducted on 13.1.2023. All 3rd and 5th semester students presented their innovative ideas. The projects were mainly focusing on the domains Artificial Intelligence, Machine Learning, Data Analytics, Block chain, Database management system etc. Total of 31 projects were exhibited on 8.7.2022 and later 8 projects were shortlisted out of 31. 4 projects from 3rd semester and 4 projects from 5th semester. Those 8 projects were evaluated on 13.1.2023.

The following are the sample list of the PBL projects carried out by 3rd sem and 5th sem students of AI&ML dept.

1.	Detection of Autism Spectrum Disorder using Machine Learning Techniques
2.	Speech based Emotion Recognition
3.	Finding effective solutions for disease and mental health issues using OpenAI
4.	Design of a Smart Blind Stick.
5.	Detection of Parkinson's disease using Speech
6.	Heart disease Prediction using ECG
7.	Lane line detection system using Vehicles Guidance
8.	ECG Monitor
9.	Youtube Transcript Summarizer.
10.	Air Gesture detection for the Disabled
11.	PBL 2.0
12.	Home Automation System
13.	Text Summarization
14.	Ultrasound Nerve Segmentation
15.	BMSIT&M Research Articles Warehouse
16.	Full autonomous real time mapping and navigation-based UAV
17.	Automated Detection and nutrient supply system for agriculture
18.	PBALO-an AI
19.	AI Solution for SOIL fertility and crop prediction
20.	Smart home Security
21.	Flood prediction and prevention
22.	Smart Irrigation
23.	Product review analysis for genuine rating
24.	Virtual health care assistant
25.	Vaccine management registration system
26.	Restaurant billing system using python

27.	Driver Drowsiness detection
28.	A blockchain-based framework for secure educational credentials

JUDGES FOR THE EVALUATION

1. Pralhad P. Teggi, Software Engineer, IBM Bengaluru.

2. Dr Bharathi Malakreddy A, Professor and Head, Department of AI & ML.

3. Dr Anupama H S, Associate Professor, Department of AI & ML.

4. Dr Vishwa Kiran S, Associate Professor, Department of AI & ML.

5. Dr Pradeep K R, Assistant Professor, Department of AI & ML.

6. Dr. Rajesh.I. S, Assistant Professor, Department of AI & ML.

7. Mrs.Archana Bhat, Assistant Professor, Department of AI & ML.

8. Dr. Niranjana murthy, Assistant Professor, Department of AI & ML.

9. Dr. Chandrashakar, Assistant Professor, Department of AI & ML.

10. Mr. Khantaraju, Assistant Professor, Department of ISE.

PBL PRIZE WINNERS List

5th Sem PBL Winners List			
Prize Winners	USN	NAME	Project Title
1st Place	1BY20AI033	NIKITA R	MED ASK
	1BY20AI034	OMKAR N	
	1BY20AI051	SHASHANK R	
	1BY20AI065	ADITHYA R	
2nd Place	1BY20AI001	A S ADITHIYAA	AIR Gesture detection for the disabled
	1BY20AI018	ISHA RAJ	
	1BY20AI028	MEGHANA RAJU K	
	1BY20AI062	VANDANA KUMAR SWAMY	

3rd Sem PBL Winners List			
Prize Winners	USN	NAME	Project Title
1st Place	1BY21AI001	AAKASH NAGAMALLI	Fully Automated Real Time Mapping and Navigation based UAV
	1BY21AI006	ANMOL.A	
	1BY21AI010	ARYAN MUKKATIRA AIYAPPA	
	1BY21AI058	VAIBHAV MK	
2nd Place (Shared)	1BY21AI008	ANUSHA BHAGWATH	AI solution for Soil Fertility and Crop Prediction
	1BY21AI017	G.JAHANAVI	
	1BY21AI023	KRUTHI M	
	1BY21AI024	M.TEJASWINI	
	1BY21AI005	ANAND R.BHAT	Smart Home Security

1BY21AI009	ARAVIND.M	
1BY21AI035	NEHA SANTHOSH THEKKETHALA	
1BY21AI052	SIRISHA SATISH	

Program Outcomes Mapped and justification

PBL projects are mapped to the following PO's

PO's Mapped:

- PBL projects are mapped to the following PO's
- PO1, PO2, PO3, PO4: These PO's are mapped because, Problem statement needs to be analyzed, designed and apply mathematical formulations for making the prototype to work.
- PO5, PO6: All projects have used different modern tools and few of them are societal concerns.
- PO9, PO10, PO12: All the batches have worked in teams with good communication. The concepts that the projects have done will be of lifelong learning.

Photos/ Screenshots

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

PBL Report

Project based Learning is incorporated for the subjects which lack the blended mode of implementation through the Curriculum prescribed by the University.

Subsequently, an analysis was carried out based on the curricular course components to mitigate the gaps. It was decided to execute the PBL for the following subjects:

III Sem	Data Structures (DSA) using C programming
V Sem	Computer Networks Python Application Development

Students were asked to form a team of 2-4 members and pursue the real world problems as far as possible to gain insight of projects implementation.

There were 54 Teams from the III semester and 60 Teams from the V Semester who have participated in the review and evaluation process. All the faculty members have participated in mentoring the Teams and Internal evaluation process.

The Final Evaluation was carried out by the External Judges.

List of PBL Winners

Semester	Prize	USN	Name of the Student	Title of the Project
VI A	I	1BY20CS220	Abha Nair	E Alarm
		1BY20CS221	Ahaana Singh	
		1BY20CS058	Hammam Ali Abdullah Ba Hamid	
		1BY20CS002	Abdulhadi Shukri Saeed Abdn	
	II	1BY20CS020	Amith R	Opinion Mining
		1BY20CS063	Hetal Rakesh Lad	
		1BY20CS068	J M Suhas	
		1BY20CS071	Jalla Sai Swetha	
V B	I	1BY20CS140	Punith kumar N	Website Blocker
		1BY20CS141	R Brindha	
		1BY20CS133	Palak kumari	
		1BY20CS144	Raksha	
	II	1BY20CS090	Kruthika C K	DRIVE IN PEACE
		1BY20CS093	Lakshmi Narayana K R	
		1BY20CS095	Lavenia Vijay Kumar	
		1BY20CS128	Nitheesh M S	
VI C	I	1BY20CS148	Rayees Hussain S A	PyroCove - Dynamic Firewalls with AI&ML
		1BY20CS153	S C Arham	
		1BY20CS156	S Sagar	
		1BY20CS192	Keshav Bhumaraju	
	II	1BY20CS194	Suhas K	Crowd funding using Polygon blockchain
		1BY20CS169	Samrudh S	

III A	I	1BY21CS003	Abhishek kumar	Student data management system
		1BY21CS005	Adbhut Shukla	
		1BY21CS020	Anish Raju	
		1BY21CS067	Hemaang Sood	
	II	1BY21CS045	Darshan Y K	Online Voting System
		1BY21CS062	Goutham Swamy DD	
		1BY21CS044	Damachandra N	
		1BY21CS033	Bhuvankumar J	
III B	I	1BY21CS088	Manav Sharma	DNA profiling with STR analysis: Forensics as case study
		1BY21CS098	Mohammed Ali Mohammed Al sakkaf	
		1BY21CS128	Pranav Srinivasa	
		1BY21CS081	Likhith Y V	
	II	1BY21CS099	Mohammed Anwar Abbod Bin Muslem	Basic College Management System
		1BY21CS091	Marwan Salim Ali Ba Matraf	
		1BY21CS102	Mohammed Shariq Shariff	
		1BY21CS086	Mahadeshwara Prasad	
III C	I	1BY21CS155	Rubini Pramod Avalakki	Organ donor system
		1BY21CS163	Sameeksha B H	
		1BY21CS185	Sonia Puri	
		1BY21CS195	Swasti S	
	II	1BY21CS173	Shraddha G Reddy	Empower illiterate
		1BY21CS148	Ranjitha	
		1BY21CS165	Sanjana V	
		1BY21CS191	Suraj G M	

JUDGES FOR THE EVALUATION

1. Mrs.Manasi Shah – Lead Pentester –Fidelity Investments
2. Mr. Manjunatha S J -
3. Mr. Jagadeesha T H M -

Photos/ Screenshots

Program Outcomes Mapped and justification

PBL projects are mapped to the following PO's

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
	✓	✓	✓	✓	✓			✓	✓	✓	✓

DEPARTMENT OF CIVIL ENGINEERING

Number of student projects evaluated during Odd semester 2022-23:

Department	No. of projects in III semester	No. of projects in V semester	Total Department wise
CV	7	13	20

Report:

Department of CIVIL ENGINEERING, BMS INSTITUTE OF TECHNOLOGY & MANAGEMENT, Avalahalli, Yelahanka, Bengaluru organized Open Day on 13th Jan 2023 to exhibit the PBL project work carried out by the students of the III and V semester students. The projects exhibited the student's ability to apply their learning to solve the real-world problems. This semester around 20 PBL batches chose the Civil Engineering Problems Based Projects and Innovative Solutions for the same through technical and smart methods. These projects were mentored by the assigned faculty members and were evaluated by internal committee on various rubrics. The shortlisted projects were demonstrated on Open Day and were evaluated by the external Jury.

JUDGES FOR THE EVALUATION

The details of the external evaluator for PBL Open Day is as follows:

**Er. Ravi J,
DIRECTOR,
SHIKHAR BUILDERS AND CONTRACTORS,
BENGALURU- 560 021**

PRIZE WINNERS LIST

The following are the winners of PBL projects based on External Evaluation conducted on OPEN DAY on 13.01.2023:

PBL- 5th Semester- 2020-Batch- CV

Open Day (13.01.2023)		Winners		
PBL- 5th Semester- 2020-Batch- CV				
Winners	MENTORS	STUDENTS NAME	USN No.	TOPIC
1ST PLACE	Dr Marsh M Bandi	Sahas Sinha Reddy	1BY20CV006	Connected Citi
		Satwik Reddy	1BY20CV015	

		Praneeth Reddy	1BY20CV025	
		Kapu Satheesh Reddy	1BY20CV020	
2ND PLACE	Mrs Archana K	Supritha A R	1BY20CV037	Design of piezoelectric staircase
		Sheethal L	1BY20CV035	
		Ankitha R	1BY20CV002	
		Sparsha K	1BY20CV036	
2ND PLACE	Mr Vinod B R	Boomika K V	1BY20CV003	Smart detection of overflow of Sewage water in Manhole
		Lekha Ramanan	1BY20CV021	
		Athish Jaikumar	1BY20CV005	
		J Akshit Jain	1BY20CV019	

PBL- 3RD Semester- 2021-Batch- CV

Open Day (13.01.2023)		**Winners**		
PBL- 3RD Semester- 2021-Batch- CV				
Winners	**MENTORS**	**STUDENTS NAME**	**USN No.**	**TOPIC**
1ST PLACE	Dr. ATHIYAMAAN V	Gokul Sharma	1BY21CV005	Structural health monitoring system using smart sensors
		Saurabh Prasad	1BY21CV020	
		Shinola M F	1BY21CV022	
		V Pavan	1BY21CV027	
2ND PLACE	Dr. ANUP EKBOTE G	Prajwal	1BY21CV015	Bagasse ash based particle boards
		Nishant	1BY21CV013	
		Manoj	1BY21CV010	
		Yashash	1BY21CV029	
2ND PLACE	Dr VIBHA V	Suhas N	1BY21CV024	Modular building units using polymeric waste
		Shashank	1BY21CV021	
		Anjusha	1BY21CV003	
		Akshay kumar	1BY21CV002	

Photos/ Screenshots of PBL Open Day 13-01-2023

Program Outcomes Mapped and justification

PBL projects are mapped to the following PO's

Quality of the PBL project is measured in terms of the consideration to factors including processes related to project identification, allotment, continuous monitoring, evaluation including demonstration of working prototypes and enhancing the relevance of projects. A senior faculty member is assigned the responsibility as PBL coordinator, who handles all the activities related to the student project work such as grouping, planning, scheduling and execution.

Justifications of POs mapping:

	Processes	Work flow	POs mapped
1	Identification of PBL projects and allocation methodology to Faculty Members	1. Formation of groups 2. Assignment of Project Guide 3. Identification of Project 4. Finalization of Project Title and Synopsis	PO2 (Problem Analysis)

2	Types and relevance of the PBL projects and their contribution towards attainment of POs	Categorization of project according to relevance	PO6 (Environment and Sustainability)
3	Process for monitoring and evaluation	1. Project Progress Presentations carried out in a semester (Phase 1 and Phase 2) 2. Grading of Project based on presentation, Implementation and Report rubrics	PO10 (Communication Skills) PO11 (Project Management and Finance) PO8 (Ethics)
4	Process to assess individual and team performance	1. Problem Definition 2. Concept 3. Team Work 4. Organization 5. Knowledge and 6. Effectiveness of Delivery	PO9 (Individual and Team Work)
5	Quality of completed PBL projects/ working prototypes/Awards received by projects etc.	1. Project demonstration for the working 2. prototype Report evaluation	PO4 (Investigate Problem) PO5 (Engineering Tool Usage)
6	Evidences of Papers Published/Awards received by projects.	1. List of Possible Publications 2. List of Possible Patents 3. List of Projects awarded in (Open Day- Competition)	PO8 (Ethics) PO9 (Individual and Team Work) PO10 (Communication Skills) PO12 (Lifelong Learning)

BMS INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(An Autonomous Institute under VTU, Belagavi, Karnataka – 590018)

Avalahalli, Doddaballapur Main Road, Yelahanka, Bengaluru, Karnataka – 560064

DEPARTMENT OF CIVIL ENGINEERING OPEN DAY on 13.01.2023:
EVALUATION SHEET – 2020 Batch V SEM

		Team Members	USN	PROJECT TOPIC	Advisor	1 (M-10) Problem Formulation and Synopsis	2 (M-10) Objectives and Methodology	3 (M-20) Implementation/ Presentation Skills	4 (M-10) Viva	5 (M-50) Total Marks
Group 1	1	Boomika K V	1BY20CV003	Smart detection of overflow of Sewage water in Manhole	Mr Vinod B R	IE:9	IE:9	IE : 18	IE : 9	IE :45
	2	Lekha Ramanan	1BY20CV021							
	3	Athish Jaikumar	1BY20CV005			EE:8	EE:9	EE: 18	EE: 8	EE :43
	4	J Akshit Jain	1BY20CV019							
Group 2	1	Sahas Sinha Reddy	1BY20CV006	Concept of model Connected Citij	Dr Marsh M Bandi	IE:9	IE:9	IE : 18	IE :9	IE :45
	2	Satwik Reddy	1BY20CV015							
	3	Praneeth Reddy	1BY20CV025			EE:9	EE:9	EE :18	EE :9	EE 45
	4	Kapu Satheesh Reddy	1BY20CV020							
Group 3	1	Supritha A R	1BY20CV037	Design of piezoelectric staircase	Mrs Archana K	IE:8	IE :9	IE :18	IE :8	IE: 43
	2	Sheethal L	1BY20CV035							
	3	Ankitha R	1BY20CV002			EE:9	EE:9	EE :18	EE :9	EE :45
	4	Sparsha K	1BY20CV036							

Internal Evaluator
Dr. DEEPAK MS

1

External Evaluator
Er. Ravi J   13/01/2023
SHIKHAR BUILDERS & CONTRACTORS

DEPARTMENT OF CIVIL ENGINEERING OPEN DAY on 13.01.2023:
EVALUATION SHEET - 2021 Batch III SEM

		Team Members	USN	PROJECT TOPIC	Advisor	1 (M-10) Problem Formulation and Synopsis	2 (M-10) Objectives and Methodology	3 (M-20) Implementation/ Presentation Skills	4 (M-10) Viva	5 (M-50) Total Marks	
Group 1	1	Gokul Sharma	1BY21CV005	Structural health monitoring system using smart sensors	Dr. ATHIYAMAAN V	IE: 10	IE: 8	IE: 18	IE: 10	IE: 46	I
	2	Saurabh Prasad	1BY21CV020								
	3	Shinola M F	1BY21CV022			EE: 9	IE: 9	EE: 18	EE: 9	EE: 45	
	4	V Pavan	1BY21CV027								
Group 2	1	Prajwal	1BY21CV015	Bagusk based particle boards	Dr. ANUP EKBOTE G	IE: 8	IE: 8	IE: 18	IE: 8	IE: 42	II
	2	Nishant	1BY21CV013								
	3	Manoj	1BY21CV010			EE: 8	EE: 9	EE: 20	EE: 7	EE: 44	
	4	Yashash	1BY21CV029								
Group 3	1	Suhas N	1BY21CV024	Modular building units using polymeric waste	Dr VIBHA V	IE: 8	IE: 8	IE: 19	IE: 7	IE: 42	II
	2	Shashank	1BY21CV021								
	3	Anjusha	1BY21CV003			EE: 9	EE: 8	EE: 19	EE: 8	EE: 44	
	4	Akshay kumar	1BY21CV002								

Internal Evaluator
Dr. DEEPAK MS

2

External Evaluator
Er. Ravi J   13/01/2023
SHIKHAR BUILDERS AND CONTRACTORS

PBL Coordinators   HoD Civil Engineering
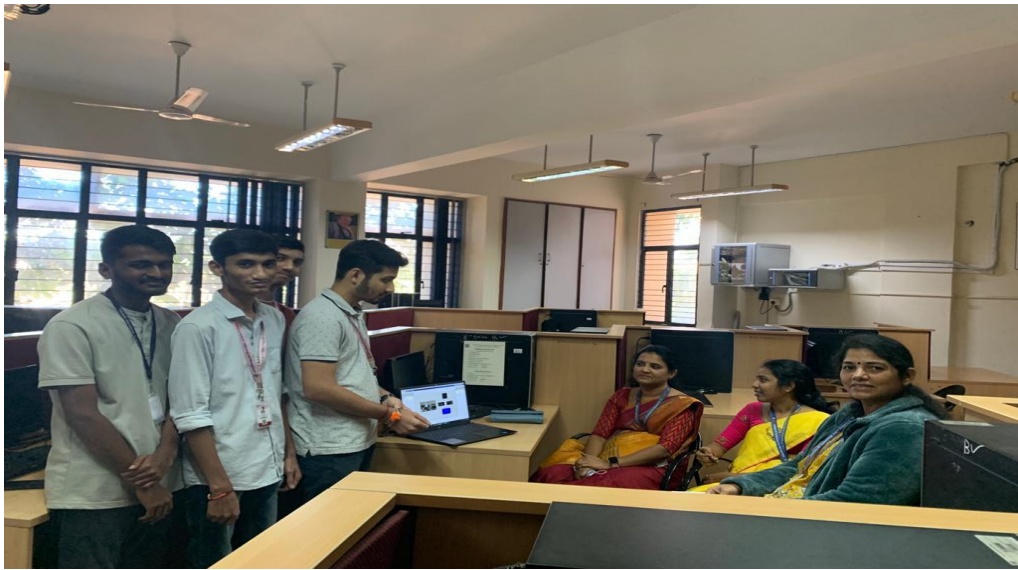
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

PBL REPORT

Department of Electronics and Communication Engineering, BMS INSTITUTE OF TECHNOLOGY AND MANAGEMENT, Avalahalli, Yelahanka, Bengaluru organized a BMSIT open day on 13th January 2023 in physical mode and students of III and V semester exhibited their projects. The projects exhibited the student's ability to apply their learning to solve the real world problems.

This semester around 105 PBL batches participated in PBL exhibition and 19 Projects were selected for second round of evaluation. These projects were presented on open day and evaluated by panel members consisting of external (from industry) and internal members based on various rubrics.

JUDGES FOR THE EVALUATION

1) **Mr. Shekar R**, AGM/Power Electronics, BHEL, Banglore.

   E-Mail: magi383@gmail.com and Ph.No: **+91 9972060599**

2) **Mr. Mr.Jerin**, Solutions Support Engineer, SAP Labs, Bangalore, India.

   E-Mail: jerinjgb@gmail.com and Ph.No: **+91 90360 60270**

PRIZE WINNERS LIST

V Semester

Sl.NO	Name	USN	Title	Guide
First Prize			
1	Achyutha gowda C P	1BY20EC009	Silk Cocoon Quality Detection System	Dr.Vijayalakshmi G V
	Alla Vamsi Krishna	1BY20EC021		
	Gangaraju Kushal Varma	1BY20EC065		
	Leti Manish Kumar	1BY20EC090		
2	S Kedhar simha	1BY20EC139	Foot Step Power Generation Using Piezo Electric Sensor	Prof. Suryakanth B
	Rakshit govind T	1BY20EC133		
	Rahul shindhe	1BY20EC130		
	Yashwanth t	1BY20EC192		
3	Tarun U	1By20ec200	Hand Gesture Recognition Using MATLAB	Dr. Anil Kumar D
	Chandu	1by20ec049		
	CHARAN G S	1BY20EC050		
	CHIRAG KUMAR N	1BY20EC051		
Second Prize			
4	Swathi G S	1BY20EC173	Detection of Kidney Stone Using Image Processor	Prof. Shilpa Hiremath
	Vanchireddy Deepika	1BY20EC181		
	Yashodha S Sridhar	1BY20EC191		
	Yasmeen Taj H	1BY20EC193		
5	Rahul kumar	1by20ec129	Red Light Accident Prone System	Prof. Asha G Hagargund
	VAISHNAVI	1BY20EC180		
	RISHABH JAISWAL	1BY20EC136		
6	Jayanth.J	1BY20EC074	Application for Text Recognition, Detection and Translation With Speech Output	Prof. Thyagaraj Tanjavur
	Archana.B	1BY20EC031		
	Deekshitha.B.S	1BY20EC052		
7	H.C SIDDHARTHA REDDY	1BY20EC069	Fire Fighting ROBO	Dr. Rashmi N
	ABHISHEK K	1BY20EC004		
	P S AAKASH	1BY20EC115		
	N SOUNDARYA	1BY20EC105		

III Semester

S.NO	Name	USN	Title	Guide
First Prize			
1	K Rajmohan	1BY21EC064	Soil Nutrient Measurement System to Support Precision Forming	Dr. Vijayalakshmi G V
	K Shreyas	1BY21EC065		
	Karthik VT	1BY21EC067		
	Likitha SR	1BY21EC073		
2	Adithya R Hiremath	1BY21EC004	Autonomous Ship With Oceanographic Sensor	Dr. Anil Kumar D
	Anu C Patil	1BY21EC015		
	Basavaprabhu S H	1BY21EC027		
	G P Varshini	1BY21EC045		
3	Satyanarayan Prashar	1BY21EC139	GETIT Application	Prof. Shilpa Hiremath
	Saurav Mishra	1BY21EC140		
	Ram Kumar	1BY21EC122		
Second Prize			
4	Charithra V	1BY21EC032	Discern-NO	Dr. Anitha V R
	Greeshma KS	1BY21EC049		
	Dhanya Subhaschandra Bhat	1BY21EC040		
	Bharath Vasishta R	1BY21EC029		
5	Spandan S Salimath	1BY21EC151	Automatic Irrigation System Adjustable According to the Season	Dr. Deepa N. Reddy
	Satish Mallappa B Patil	1BY21EC138		
	Suhas B S	1BY21EC154		
	Yugal Kishore V	1BY21EC182		
6	P.Shishir Aithal	1BY21EC101	OET Meter	Prof. Asha G Hagargund
	Karthik Patil	1BY21EC066		
	R Subhash	1BY21EC115		
	Jhenkar MJ	1BY21EC062		

Program Outcomes Mapped and justification

PBL projects are mapped to PO1, PO2, PO3, PO6, PO9, PO10, PO11, P012.

PBL Coordinator   HoD

(ECE)

DEPARTMENT OF ELECTRICAL

AND

ELECTRONICS ENGINEERING

Open Day at BMSIT&M

E&EE Department organized the Open Day at BMSIT&M on 12th and 13th of January, 2023. The PBL Projects were evaluated on 12th January by the BMSIT&M internal judges and selected 3 entries from the 2nd and 3rd year, were further evaluated by the external judges on 13th January, 2022.
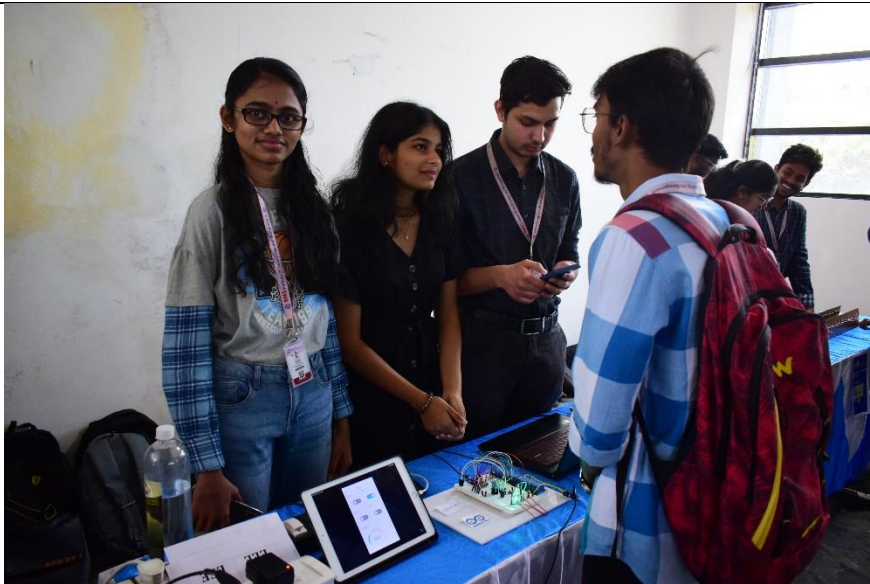
Mr. Murali Krishna, Dy.Manager/Power Electronics, BHEL was the invited external judge for the Open Day. The following are the winners of the PBL Project Exhibition cum Competition.

	3rd Sem				
Batch	**Name**	**USN**	**Project Title**	**Guide**	**Winners**
B6	R RITHVIK	1BY21EE028	Low Cost Automated Camera Slider	MANJULA B K	First Place
	SIDDHARTH DEVARAJ	1BY21EE042			
	SHIREESH S SHENOY	1BY21EE039			
	ANJAN KUMAR H R	1BY21EE005			
B9	MOHAMMED NAVEED	1BY21EE020	Home Automation using Aurdino	MANJUNATH BABU P	Second Place
	MOON SHUKLA	1BY21EE021			
	ALOK KUMAR	1BY21EE003			
	SNEHA SHAETTY	1BY21EE043			
	5th Sem				
Batch	**Name**	**USN**	**Project Title**	**Guide**	**Winners**
B1	DHARSHAN R	1BY20EE010	Smart Water Control System	DR N RAMARAO	First Place
	PIYUSH PATTNAIK	1BY20EE033			
	RAHUL KUMAR SINGH	1BY20EE042			
	PRAMODHINI P	1BY20EE037			
	VINEETH R HARTHIKOTE	1BY20EE055			
B8	JASHWANTH VARMA M	1BY20EE017	Smart Room System	BABU NAIK G	Second Place
	MIDHYA DEVASIA	1BY20EE027			
	VINAY JALIHAL	1BY20EE054			
	NISARGA G R	1BY20EE029			

The evaluation was based on: the following points: Completion of the set objectives : **10 Marks,** Societal relevance : **10 Marks,** Presentation of the Project: **10 Marks,** Viva Voce : **10 Marks,** Report : **10 Marks**
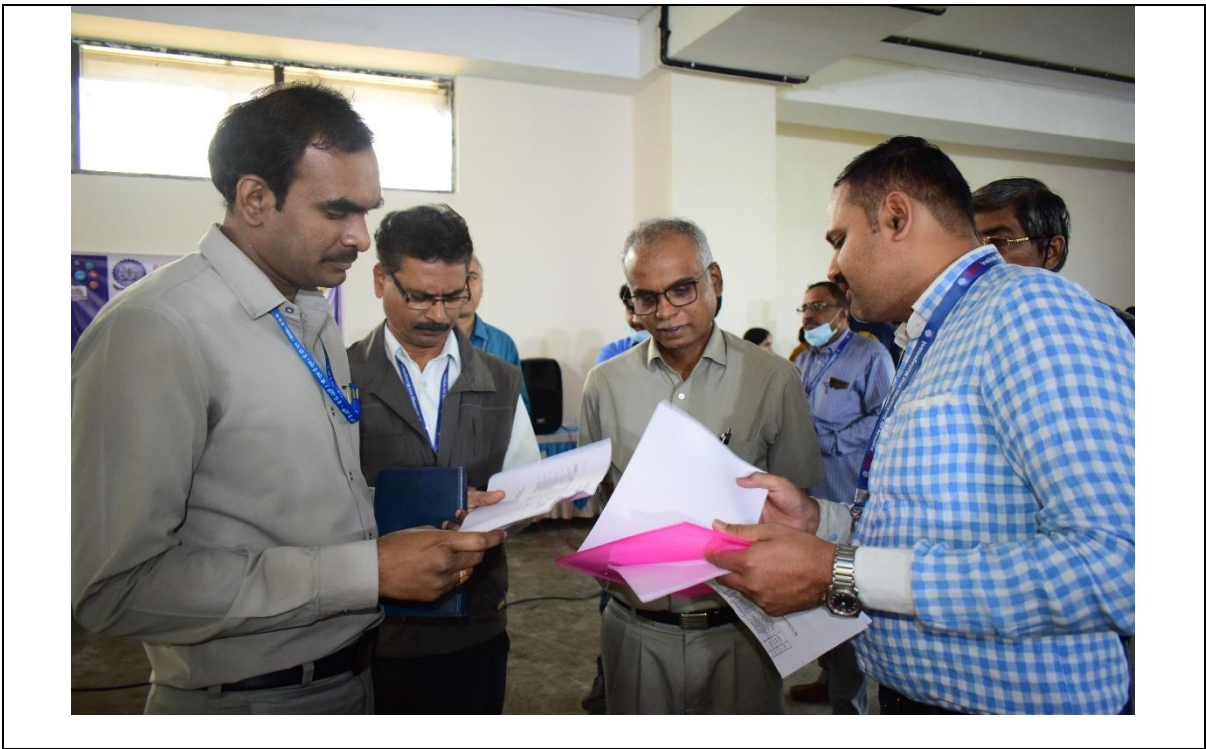
First round of evaluation was held on 12th January at 11.00 am. The top 3 projects from each of 3rd and 5th Semester competed for a cash prize of 5000 Rs. on 13th January, 2023 at the Lab Block. Few glimpses of the event are as follows:

HoD, EEE

DEPARTMENT OF ELECTRONICS

AND

TELECOMMUNICATION ENGINEERING

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

OPEN DAY REPORT-2023

Department of ETE organized PBL and Open day on 12.1.2023 and 13.1.2023, both 3rd sem and 5th sem students participated in the events. The external evaluator Dr Vinayaka babu Director , 4 semi technology industry evaluated fairly all the projects . There were four projects selected from each semester for event. Students showcase their Projects well and presented well. Two projects from each semester are selected for first and second prize.

Open Day Prize winners

Sl No.	Title of the Project	Sem	USN	Students	Name of the Guide	Prize
1	RF Solution to IOT and WSN	5th	1BY20ET030 1BY20ET032 1BY20ET049	Karthik S Halkeri Kiran Veer M Sagar Kothawar	Dr. Thejaswini S	I
2	Accident prevention alcohol Monitoring systems		1BY20ET029 1BY20ET059 1BY20ET046 1BY20ET008	K Sree Charan T Sai kiran Reddy Ram Kumar D.Anirudh Karthik	Dr. Sowmyashree M S	II
3	Electronic Control unit	3rd	1BY21ET033 1BY21ET008 1BY21ET010 1BY21ET021	R Venkatesh Asrithya Vardhan Chandan E Narasimha Murthy	Dr. Seema Singh	I
4	Design and Development of Cost effective Ventilation		1BY21ET009 1BY21ET018 1BY21ET027 1BY21ET036	Bellishree B M Janhavi.V Prakruthi.M.C Riya Pawar	Dr.Mallikarjuna Gowda CP	II

POs mapped:
PO3, PO8, PO9, PO10, PO11, PO12

    Project Coordinator　　　　　　　　　　　　　　　　　　　　**HOD,ETE**

(Prof. Saritha I G)　　　　　　　　　　　　　**(Dr.Mallikarjuna Gowda C P)**

DEPARTMENT OF

MECHANICAL ENGINEERING

DEPARTMENT OF MECHANICAL ENGINEERING

The Department of Mechanical Engineering, BMS INSTITUTE OF TECHNOLOGY AND MANAGEMENT, Avalahalli, Yelahanka, Bengaluru organized a PBL Project review on 12th and 13th January 2023 to exhibit the project work carried out by the students of the III and V semester students. These projects showcase the student's ability to apply their learning to solve the real-world problems.

In this semester, III semester students were grouped into 7 PBL batches (four students in each batch), while V semester students were grouped into 15 PBL batches (four students in each batch) and totally 22 PBL batches carried out different projects. Most of the projects involves design and fabrication work and few were simulation or analysis based. All these projects were evaluated by internal committee on Thursday, 12th January 2023 based on the various rubrics in preliminary round and after critical evaluation 5 best projects from V semester and 3 best projects from III semester batches were selected for final round for OPEN DAY – Exhibition on Friday, 13th January 2023.

The details are as follows:

Semester: V

SI NO.	Group/ Batch No.	Name of the student	USN	Title of the Project	Name of the Guide
1	B1	BHOOMIKA BHAT	1BY20ME009	POWER GENRATION USING FARADAY THEORY	Dr. KEERTHIKUMAR N
		RAHUL KUMAR	1BY20ME037		
		SHREYAS KASHYAP	1BY20ME044		
		V V SAI VEEKSHANA	1BY20ME048		
2.	B3	ATHARVA DESAI	1BY20ME007	AUTOMATED WATER TANK CLEANING MACHINE	PROF. K. CHANDRASHEKARA REDDY
		CHETAN GADA	1BY20ME011		
		GAURAV TRIPATHI	1BY20ME017		
		LOBEMO MARK KIKON	1BY20ME020		
3.	B10	SHYLESH A	1BY21ME410		
		NAVEEN N M	1BY21ME407		

		TARUN R	1BY21ME412	AUTOMATED STREET LIGHT CONTROLLER	PROF. T N PRAVEEN KUMAR
		SHIVRAJ	1BY20ME043		
4.	B6	ANANTHA H V	1BY21ME400	AUTOMATED COCONUT CREAPER	PROF. NITHYA POORNIMA
		HEMANTH KUMAR G	1BY21ME404		
		S CHANDAN DEVADATT	1BY21ME409		
		VISHWANATH S M	1BY21ME414		
5	B7	MOHIT K M	1BY20ME028	WATER LEVEL INDICATOR	Prof. SRIGANESH T G
		PAVAN M	1BY20ME035		
		M JAWAHAR BABU	1BY20ME024		
		NISHANTH M	1BY19ME402		

Semester: III

SI NO.	Group/ Batch No.	Name of the student	USN	Title of the Project	Name of the Guide
1	B3	JOTHISHWAR KANNAN	1BY21ME016	PICK AND PLACE ROBOT	PROF. SUNDARESH S
		R ANANTH	1BY21ME017		
		SYED ZAID	1BY21ME018		
		HARSH YADAV	1BY21ME015		
2.	B4	AISHWARYA V	1BY21ME006	IMPROVING AERODYNAMICS WITH BIOMIMICRY	DR. Y J JAGADEESH
		GANESH S	1BY21ME014		
3.	B7	MADHUKIRAN A.E.	1BY21ME018	DEDICATED HIGHWAY OVERHEAD LANES	DR. RAVICHNADRA K
		PRASANNA.S	1BY21ME023		
		PRUTHVI.P	1BY21MEO24		
		YASH HARSHAD GODISHWAR	1BY21ME039		

In the final round held OPEN DAY on Friday, 13th January 2023, Mr. BALAKRISHNA KAMAT, Senior Manager - Operations, Supply Chain Analytics, Genpact Pvt Ltd, Bengaluru as External Industry expert and Dr. O GURUMOORTHY, Assistant Professor as Internal Academic member critically evaluated these projects based on the societal relevance, completion of the set objectives, presentation and queries and finally rated the projects based on the marks scored. Top two projects from

each semester were awarded with a cash prize. The details of the award-winning projects are as follows:

PRIZE WINNERS List

Semester: V

SI NO.	Name of the student	USN	Title of the Project	Name of the Guide	POSITION
1	BHOOMIKA BHAT	1BY20ME009	POWER GENRATION USING FARADAY THEORY	Dr. KEERTH IKUMAR N	I PRIZE
	RAHUL KUMAR	1BY20ME037			
	SHREYAS KASHYAP	1BY20ME044			
	V V SAI VEEKSHANA	1BY20ME048			
2.	ATHARVA DESAI	1BY20ME007	AUTOMATED WATER TANK CLEANING MACHINE	PROF. K. CHANDRASHEKARA REDDY	II PRIZE
	CHETAN GADA	1BY20ME011			
	GAURAV TRIPATHI	1BY20ME017			
	LOBEMO MARK KIKON	1BY20ME020			

Semester: III

SI NO.	Name of the student	USN	Title of the Project	Name of the Guide	POSITION
1	AISHWARYA V	1BY21ME006	IMPROVING AERODYNAMICS WITH BIOMIMICRY	DR. Y J JAGADEESH	I PRIZE
	GANESH S	1BY21ME014			
2.	MADHUKIRAN A.E.	1BY21ME018	DEDICATED HIGHWAY OVERHEAD LANES	DR. RAVICHNADRA K	II PRIZE
	PRASANNA.S	1BY21ME023			
	PRUTHVI.P	1BY21MEO24			
	YASH HARSHAD GODISHWAR	1BY21ME039			

Glimpses of OPEN DAY – Project Exhibition

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

OPEN DAY   REPORT

Date:13/1/2023

Project exhibition was organized on 13th January 2023 for 3rd year and 2nd year students of ISE Dept. and evaluation of projects were carried out by two eminent industry expert, Mrs. Praveen CEO of Digipix Technology, Bangalore and one more expert Mrs. Kumar Goud ,Manager of Capgemini after various process of PBL Reviews with in internal expert team evaluation from Dept. of ISE. and as per the calendar of events 20/10/2022 was for PBL team formation and guide allotment followed by 2/11/2022 for synopsis submission and 15/11/2022 PBL Review1 and 23/12/2022 PBL review2 and 13/1/2023 open day was organized

Open day	HOD and PBL coordinators on OPEN day

5th sem students giving Demo of their project for HOD on OPENDAY	Evaluator Mrs. Praveen evaluating project on OPEN day for 2year students
Evaluator Mrs. Kumar Goud evaluating project on OPEN day for 3year students along with PBL coordinators Dr.Drakshaveni G and Dr.Anil kumar	HOD and PBL coordinator watching the projects

Fifth sem students forProject exhibition	Fifth sem students forProject exhibition
First review of fifith sem students	Second review from team of ISE staff

Second PBLpresentaiton by students	Second PBLpresentaiton by students

Prize distribution from HOD

Prize distribution from HOD