

BMS INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(AN AUTONOMOUS INSTITUTION, AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI, AND APPROVED BY AICTE, NEW DELHI)
(ACCREDITED BY NATIONAL ASSESSMENT & ACCREDITATION COUNCIL (NAAC))
Doddaballapur Main Road, Avalahalli, Yelahanka, Bengaluru-560064

import CSE

VOLUME 6, ISSUE 1

NEWSLETTER (JULY-DECEMBER 2023)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACCREDITED BY NATIONAL BOARD OF
ACCREDITATION

VISION

To develop technical professionals acquainted with recent trends and technologies of computer science to serve as a valuable resource for the nation/society.

MISSION

Facilitating and exposing the students to various learning opportunities through dedicated academic teaching, guidance, and monitoring.

PROGRAM EDUCATIONAL OBJECTIVES

- 1.Lead a successful career by designing, analysing, and solving various problems in the field of Computer Science & Engineering.
- 2. Pursue higher studies for enduring edification.
- 3. Exhibit professional and team-building attitude along with effective communication
- 4. Identify and provide solutions for sustainable environmental development.

PROGRAM OUTCOMES

- 1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2.**Problem analysis:** Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

- 3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- 4.**Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis, and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5.**Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- 6.**The engineer and society:** Apply to reason informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues, and the consequent responsibilities relevant to the professional engineering practice.
- **7.Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9.**Individual and teamwork:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10.**Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

- 11.**Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- 12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES

- 1. Analyse the problem and identify computing requirements appropriate to its solution.
- 2. Apply design and development principles in the construction of software systems of varying complexity.

M.TECH IN COMPUTER SCIENCE AND ENGINEERING PROGRAM EDUCATIONAL OBJECTIVES(PEOs)

- 1. Apply analytical thinking to solve problems through research in the areas of Computer Science engineering.
- 2. Adapt to changing technological trends through life-long learning by exhibiting professional ethics, integrity, and career growth.
- 3. Develop skills to facilitate in providing sustainable solutions by addressing the ever growing challenges of society.

PROGRAM OUTCOMES

- 1.Independently carry out research and development work to solve practical problems related to Computer Science and Engineering domain.
- 2. Write and present a substantial technical report/document.
- 3. Demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program.
- 4. Analyse the acquired domain knowledge for providing a feasible solution(s)
- 5. Relate the learning outcomes to build requisite competency in a professional environment.
- 6. Appraise the need for engaging in lifelong learning

HOD'S DESK



Dr. Thippeswamy G BE, ME, Ph.D.

I am extremely happy to share with you the progress; Department of Computer Science & Engineering has made during the 2023 – 2024 EVEN semester. The Department has been one of the most vibrant among all, in terms of students, faculty, facility, placements, internships, and incubation centres. The department is recognized as a Research Centre by VTU and 12 scholars who have enrolled for Ph.D. The department is supported by 21 qualified and experienced faculty members with Nineteen Doctoral degree holders in different domains. The department has a team of highly-skilled, motivated, proficient faculty, and technical staff members who are striving hard continuously to enhance the quality of education.

The department has highly competent students who are undergoing internship in reputed companies getting stipends up to Eighty thousand rupees per month. The Department has adopted the practice of Outcome-Based Education (OBE). The Undergraduate Programme is accredited by National Board of Accreditation (NBA), New Delhi, and Permanently Affiliated to Visvesvaraya Technological University (VTU), Belagavi.

The department has set up student chapters like the IEEE student club and CSI on the campus to bridge the gap between industry and academia with a vision, "IT for Masses", thus enabling IT professionals and computer users to work towards making the profession an area of choice. With this, I am very confident that the department is poised to take on challenges to meet the industrial and societal needs in years to come...

TEACHING STAFF

PROFESSORS



Dr. Thippeswamy G BE, ME, Ph.D. Professor & HOD



Or. Arunkumar B R BSc, MCA,M.Phil(CS),PhD M.Tech (CSE), PGDIPR-NLSIU



Dr. Anil G.N BE, M. Tech, D.Sc Professor & Vice Principal



Dr. Bhuvaneshwari C M B.E., M.Tech., Ph.D

ASSOCIATE PROFESSORS



Dr.HemaMalini B H BE, M.Tech, Ph.D



Mrs. Bharathi R BE, M.Tech, (Ph.D)



Dr. Mahesh G B.E, M.Tech,Ph.D



Dr. Satish Kumar B.E, ME, Ph.D PG Coordinator



Dr.Nagabhushan S.V B.Sc, MCA, Ph.D



Mrs. Vishakha Yadav B.E, MBA, MSc(Engg. by Research),(Ph.D)



Mr. Muneshwara M S B.E, M.Tech, (Ph.D)



Mr. Anand.R B.E, M.Tech, (Ph.D)



Mrs. G.Y.Durga Devi B.Tech, M.Tech ,(Ph.D)



Mr. Jagadish.P B.E, M.Tech, (Ph.D)



Mrs. Durga Bhavani A B. Tech, M. Tech, (Ph.D)



Mr. Rajesh N V B.E, M.Tech,(Ph.D)



Ms. Ambika G N B.E, M.Tech, (Ph.D)



Dr. Vidya Rajesh Pai B.E, M.Tech, Ph.D



Mrs. Mari Kirthima B.E, M.Tech, (Ph.D)



Dr. Ashwini N B.E, M.Tech, Ph.D



Dr. Radhika K R B.E, M.Tech, Ph.D



Mr. Guruprasad S B.E, M.Tech, (Ph.D)



Dr. Arunakumari B N B.E, M.Tech, Ph.D



Dr. Srivani P B.E, M.Tech, Ph.D



Mr. Shankar R B.E, ME, (Ph.D)



Dr. Lakshmi B N B.E, M.Tech, Ph.D



Dr. Archana R A B.E, M.Tech, Ph.D



Dr. Dhanalakshmi B.E, M.Tech, Ph.D



Dr. Manoj H M B.E, M.Tech, Ph.D

NON-TEACHING STAFF



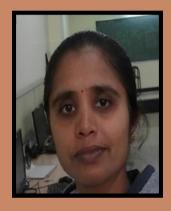
Sri. Yatheesh N G System Analyst



Sri. M. Adinarayana Reddy Instructor



Smt. Ragini TN
Instructor



Smt. Bhagya. M Instructor



Sri. Venkatesh Banagaar Assistant Instructor



Sri. Hareesh Naik
Assistant Instructor



Sri. Shivaprasad

Honnatappa

Assistant Instructor



Smt. Rosary Jospene Mary Second Division Assistant

TABLE OF CONTENTS

SL. NO.	TITLE	PAGE NO.	
1	Mou's	1	
2	FACULTY AWARDS	2	
3	MEMORABLE MOMENTS/BEST PRACTICES	4	
4	INDUSTRY-INSTITUTE INTERACTIONS	8	
5	FACULTY INTERNSHIP	9	
6	TECHNICAL FEST	10	
7	SEMINARS/EXPERT TALKS	11	
8	ALUMNI INTERACTION	13	
9	RESEARCH CENTRE ACTIVITIES	15	
10	DEPARTMENT CO-CURRICULAR ACTIVITIES	16	
11	PUBLICATION OF RESEARCH PAPERS BY FACULTY MEMBERS	17	
12	INTERNATIONAL CONFERENCE	18	
13	STUDENT PUBLICATIONS	20	
14	BOOK CHAPTER PUBLICATIONS	21	
15	BOOK AUTHORED	22	
16	WORKSHOPS/ SEMINARS / FDPS ATTENDED	23	
17	ONLINE COURSES	25	

DEPARTMENT ACTIVITIES INFORMATION

SL. NO.	Department Activities List	Count
1	Mou's	1
2	FACULTY AWARDS	2
3	MEMORABLE MOMENTS/BEST PRACTISES	4
4	INDUSTRY-INSTITUTE INTERACTIONS	1
5	FACULTY INTERNSHIPS	1
6	TECHNICAL FEST	1
7	SEMINARS/EXPERT TALKS	2
8	ALUMNI INTERACTIONS	2
9	RESEARCH CENTRE ACTIVITIES	1
10	DEPARTMENT CO-CURRICULAR ACTIVITIES	1
11	PUBLICATION OF RESEARCH PAPERS	1
12	INTERNATIONAL CONFERENCE	2
13	STUDENT PUBLICATIONS	1
14	BOOK CHAPTER PUBLICATIONS	1

SL. NO.	Department Activities List	Count
15	BOOK AUTHORED	1
16	WORKSHOPS/ SEMINARS / FDPS ATTENDED	2
17	ONLINE COURSES	1

MOUS / AWARDS / RECOGNITIONS

MOU

1.MoU was signed with Rayvector Technologies and BMS Institute of Technology and Management by the HOD and other coordinators Dr. Srivani, Prof Bharathi, Prof Mari Kirthima and Prof.Durga Bhavani. In August 2023



FACULTY AWARDS

1.Dr. Vidya Pai, Assistant Professor, received Ph.D. award during convocation from VTU Belagavi, on 01.08.2023



2. Dr. HemaMalini BH, Associate Professor, Dept of CSE, received a national level award "Shikshakaratna Puraskaara 2023", and felicitation by Dr. C N Ashwath Narayan, Ex- Higher Education Minister, Govt of Karnataka, on 23-9-2023 at Gandhi Sahitya Sangha, 8th Cross Road, Malleshwara, Bengaluru.







MEMORABLE MOMENTS/BEST PRACTICES

1. OPEN DAY ON 8.7.2023

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 6TH SEM subject Web technology Development

There were 62 Teams from the VI 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 Judge Mr. Ruchir Dubey ,(2011 BATCH ALUMNUS) , Software Development Engineer 3, Whatfix Pvt. Ltd.





LIST OF PBL WINNERS					
Sem	Prize	usn	Name of the Student	Title of the Project	Guide
	ī	1BY20CS011	Aditya Prasanth	ERZA-A chatGPT powered AI personal assistant	Dr.Nagabhushan S V
		1BY20CS014	Ahobilesha		
VI A		1BY20CS017	Akshay A R		
		1BY20CS025	Anoop Shastri S		
	,,	1BY20CS028	Anushka Yadav	CicryP : NFT Marketplace	
	II	1BY20CS049	Darshini K J		
		1BY20CS140	Punith kumar N		
	ı	1BY20CS141	R Brindha	We Meet	
	•	1BY20CS133	Palak kumari		
VI B		1BY20CS144	Raksha		Prof.Muneshwara M S
VID	11	1BY20CS104	Manasa M	Early parkinson's disease Detection	Fror.Pluneshward Pl 5
		1BY20CS117	M Hithyshi		
		1BY20CS119	N Mythili		
		1BY20CS130	Nithya H S		

LIST OF PBL WINNERS					
Sem	Prize	usn	Name of the Student	Title of the Project	Guide
VI C	1	1BY20CS162	Sai Harshit B	Garuds: 10T based Home Security	Prof.Jagadish P
		1BY20CS154	S Guru Prasad		
		1BY20CS215	Vigneshwaran PS		
		1BY20CS159	Saeed Ahmed Alojily		
		1BY20CS148	Rayees Hussain SA		
	11	1BY20CS153	CS153 S C Arham Sol X-Solar energy		
	11	1BY20CS156	S Sagar	Management with Blockchain	
		1BY20CS192	Keshav Bhumaraju		

2. Parent teachers meeting was conducted by the department of CSE seminar hall, 4th floor, BSN block on 12.8. 2023, .Around 110 parents were present for the meeting along with teachers.





3. PBL Project exhibition was organized on 5.9,2023 for 4th semester students at institute level and evaluation of projects were carried out by experts, coordinated by Dr. Manoj H M, PBL coordinator, Dept. of CSE. Experts were academician Dr. Hemamalini B H, Associate Professor, Dept. of CSE and industry expert Mr. Harish C N, IBM India Pvt Ltd, Bangalore. Internal PBL Final reviews was held on 4.9.2023 from an internal expert evaluation team and selected projects were informed to present it on OPEN DAY.





INDUSTRY-INSTITUTE INTERACTION

INDUSTRIAL VISIT

INDUSTRIAL VISIT FOR 7TH SEM



INDUSTRIAL VISIT FOR 2ND SEM



FACULTY INTERNSHIP

- 1. Prof. Muneshwara M S, Asst. Prof., Dept. of CSE has undergone industry internship at SQE SYSTEMS & SOLUTIONS from 18.7.2023 to 28.07.2023
- 2.Dr.Mahesh G, Associate. Professor, Dept. of CSE has undergone industry internship at PUSHKALA TECHNOLOGIES from 17.7.2023 to 27.07.2023
- 3. Prof. Jagadish P, Asst. Prof., Dept. of CSE has undergone industry internship at SJ VENTURES from 20.07.2023 to 1.08.2023
- 4.Dr. Srivani P, Asst. Prof., Dept. of CSE has undergone industry internship at Rayvector from 15.7.2023 to 27.7.2023.
- 5. Prof. Bharathi R, Associate. Professor, Dept. of CSE has undergone industry internship at DigiPix TECHNOLOGIES from 17.7.2023 to 28.07.2023
- 6.Dr. Archana R A, Assistant Professor, CSE has undergone industry internship at Infidata Technologies from 11.8.2023 to 22.8.2023.

TECHNICAL FEST

1. The Techtransform 2023 was a highly successful and impactful technical event held on 22 and 23 December at Department of cse. The event brought together professionals, experts, and enthusiasts from various fields to exchange knowledge, share insights, and foster collaboration in the everevolving world of technology.

SEMINARS / EXPERT TALKS

EXPERT TALK ORGANISED

1. Department of CSE organised an expert talk on the topic "Career Guidance" for the first year students as a part of Induction Program by Mr. Vishnuvardhan Y Founder at Exposys Data Labs, Bengaluru on 9.9.2023





2. Department of CSE organized an ALUMNI INTERACTION with the first year students as a part of Induction Program by Mr. Chethan Patel (2023 BATCH ALUMNA), Associate Software Engineer, Mobileum. on 9.9.2023.





3. Department of CSE organised an expert talk on the topic "Career Guidance" for the third year students by Mr. P.N. Santosh, CEO & Co-Founder, of CareerLabs on 19.12.2023









ALUMNI INTERACTION

1. Department of CSE organized an expert talk on the topic "Learn Git and Version Control "for 4th semester students on 22.7.2023 by Mr. Ruchir Dubey, (2011 BATCH ALUMNA), Software Development Engineer 3, Whatfix Pvt. Ltd and Mr. Nitin Jain, Senior Engineering Manager Nutanix Pvt. Ltd.





2.Mr. Sridhar C, CSE 2008 ALUMNI, years of experience 15+ at Accenture. Past experience in Wipro, Oracle, Victoria's Secret / LBrands, working with multiple NGO's and Political party invited for Tech Transform 2023 as a part of "Series of Dus-min talk by Alumni" on 23.12.2023





RESEARCH CENTRE ACTIVITIES

- 1.Mr. Naveen Chandra Gowda(1BY17PCS02) defended his final Ph.D viva- voce on 26.10.2023 at 10.00 am at Research center Department of CSE, BMSIT&M. He carried out his research under the guidance of Dr. Bharathi M A, professor, department of AI&ML, BMSITM.
- 2.Mrs.Vinutha H (1BM15PEJ28), completed her Ph.D viva-voce on 8.12.2023 at CSE Seminar Hall, Dept.CSE, BMSIT&M under the guidance of DR.Thippeswamy G, Hod-CSE, Dept.of CSE, BMSIT&M.

DEPARTMENTAL CO-CURRICULAR ACTIVITIES

OBE ACTIVITY

1.Dept. of CSE Final year students Karthik Prabhu, Jayanth, Keval Krishna, Yusuf has been done Poster presentation on "AR/ VR based rural education" in Bangalore Tech Summit, 2023.



PUBLICATION OF RESEARCH PAPERS BY THE FACULTY MEMBERS

INTERNATIONAL JOURNAL

1.H. S. M, T. SK, Gupta P, McArdle G (2023), A Harris Hawk Optimisation system for energy and resource efficient virtual machine replacement in cloud data centers. PLoS ONE, 18(8):e0289156. https://doi.org/10.1371/journal.

INTERNATIONAL CONFERENCE

- 1.Dr. Arunakumari B. N, presented paper entitled 'Use of propositional logic in building AI Logic and game development', in the IEEE 14th International Conference on Computing, Communication and Networking Technologies (ICCCNT) conference which is being organized during 6.7.2023 8.7.2023 at IIT Delhi.
- 2.Dr. Arunakumari B. N, presented paper entitled 'Simplifying structure and pattern in complex social network using graph of isomorphism' in the IEEE 14th International Conference on Computing, Communication and Networking Technologies (ICCCNT) conference which is being organized during 6.7.2023 8.7.2023 at IIT Delhi.
- 3.Dr. Arunakumari B. N, presented paper entitled 'Enhancing the quality and efficiency of mental health care using decision trees', in the IEEE 14th International Conference on Computing, Communication and Networking Technologies (ICCCNT) conference which is being organized during 6.7.2023 8.7.2023 at IIT Delhi.

- 4.Dr. Arunakumari B. N, presented paper entitled 'An efficient management of delivery and logistics using Euler graph', in the IEEE 14th International Conference on Computing, Communication and Networking Technologies (ICCCNT) conference which is being organized during 6.7.2023 8.7.2023 at IIT Delhi.
- 5. Dr. Arunakumari B. N, presented paper entitled 'An ameliorated methodology for water supply and management using binary trees', in the IEEE 14th International Conference on Computing, Communication and Networking Technologies (ICCCNT) conference which is being organized during 6.7.2023 8.7.2023 at IIT Delhi.
- 6.Dr. Arunakumari B. N, presented paper entitled 'An efficient way to solve complex rook polynomials in strategic games', in the IEEE 14th International Conference on Computing, Communication and Networking Technologies (ICCCNT) conference which is being organized during 6.7.2023 8.7.2023 at IIT Delhi.

STUDENTS PUBLICATION

1. Anjomshoae, Sule, Amro Najjar, Davide Calvaresi, and Kary Främling. "Explainable agents and robots: Results from a systematic literature review." In 18th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2019), Montreal, Canada, May 13–17, 2019, pp. 1078-1088. International Foundation for Autonomous Agents and Multiagent Systems, 2019.

BOOK CHAPTER PUBLICATION

1.Dr.Arun kumar B R, Professor, Dept. of CSE has authored a book titled "Handbook of Outcome-Based Education Model (OBE): Best Practices and Formats for OBE Implementation in Technical Higher Education Programs" published by Book Publishing International (India and U.K.) in July 2023,

BOOK AUTHORED

1.Dr. HemaMalini B H, Associate Professor, Dept. of CSE published a book, "Performance Analysis of Engineering Students: Doctoral Thesis", on 11.7.2023, on Amazon, with ISBN 979-8459307948, Released in 13 countries: United States, Canada, United Kingdom, Germany, France, Italy, Australia, Netherlands, India, Indonesia, Nepal, Qatar, Yemen, ASIN: B0C9S8SJ35, Publisher: Independently published (July 11, 2023), Language: English

WORKSHOPS / SEMINARS / FDPS ATTENDED

FDP / WORKSHOPS / STTP

- 1.Dr. Dhanalakshmi B K, Assistant Professor, Department of CSE attended FDP at MS Ramaiah Institute of technology in collaboration with IBM on "In-Person Faculty Buildathon" from 21.07.2023 to 26.07.2023 at Bangalore.
- 2.Dr. Archana R A, Assistant Professor, Department of CSE attended FDP at MS Ramaiah Institute of technology in collaboration with IBM on "In-Person Faculty Buildathon" from 21.07.2023 to 26.07.2023 at Bangalore.
- 3. Prof. MUNESHWARA M S, Asst. Prof. Dept. of CSE participated in "5 days DST SERB Sponsored FDP on New Opportunities for Emerging 2 D Materials in Bioelectronics and Biosensors" from 11.09.2023 to 15.09.2023 organised by Department of Electronics and Communication Engineering, CMR Institute of Technology, Bengaluru, India.

- 5.Prof Jagadish P, Asst.Professor, Department of CSE attended 5 days FDP on "Angular JS and Node JS" 16.10.2023 to 20.10.2023) at SVCE Bangalore.
- 6.Prof. Durgadevi G Y, Assistant.Professor, Department of CSE attended 5 days FDP on "Angular JS and Node JS" from 16.10.2023 to 20.10.2023 at SVCE Bangalore.
- 7.Prof. Vishakha Yadav, Assistant. Professor, Department of CSE attended 5 days FDP on "Angular JS and Node JS" from 16.10.2023 to 20.10.2023 at SVCE Bangalore.
- Prof. Muneshwara M S, Asst.Professor, Department of CSE participated & completed AICTE Training and 8.Learning (ATAL) Academy FDP on "Data Science Tools for Secure Cloud Computing" on 30.10.2023 to 4.14.2023 at CMR INSTITUTE OF TECHNOLOGY 9.Bengaluru.
 - Prof. Anand R, Asst.Professor, Department of CSE participated & completed AICTE Training And Learning (ATAL) Academy FDP on "Data Science Tools for Secure Cloud Computing" on 30.10.2023 to 4.14.23 at CMR INSTITUTE OF TECHNOLOGY Bengaluru.

ONLINE COURSE

- 1.Dr. HemaMalini B H, Associate Professor, Dept. of CSE, completed the 22.5 hours online course on "Deep Learning A-Z, 2023: Neural Networks, Al & ChatGPT Bonus" on Udemy . July 2023.
- 2.Dr. Anil G.N Professor, Dept. of CSE, completed the 29.5 hours online course on "Leadership: You can Speak like a Leader" on Udemy. 1.8.2023.

EDITORIAL TEAM

STAFF EDITOR



Mr.Muneshwara M S B.E,M.Tech,(Ph.D)

STUDENT EDITORS



ABHISHEK KUMAR 5TH SEM CSE



ADBHUT SHUKLA
5TH SEM CSE



ARJUN P 5TH SEM CSE



ANISH RAJU 5TH SEM CSE