



# **BMS Institute of Technology & Management**

**(An autonomous Institution, Affiliated to VTU Belagavi)**

**Avalahalli, Yelahanka, Bengaluru-560064**

## **DEPARTMENT OF MCA**

### **AGRATHA-MCA NEWSLETTER**

**THE BEST WAY TO PREDICT THE  
FUTURE IS TO INVENT IT." –  
ALAN KAY**

**JANUARY 2024-JUNE 2024**

**Vol.12, Issue 1**



ज्ञान विज्ञान रूपायै ज्ञान मूर्ते नमो नमः।  
नाना शास्त्र स्वरूपायै नाना रूपे नमो नमः॥



**DEPARTMENT OF MCA**  
**BMS INSTITUTE OF TECHNOLOGY AND MANAGEMENT**

Avalahalli, Doddaballapur Main Road, Yelahanka, Bengaluru-560064

Phone: 080-68730419, 9035358066 (HoD)

Email: hod\_mca@bmsit.in, Website: <https://bmsit.ac.in>



## Words from the HoD Desk



The present issue of AGRATHA puts forward all the events and contributions of the staff and students of MCA from January 2024 to June 2024. The Department of MCA has contributed its portion in the development of the institution in line with the institute's strategic plan.

The department of MCA has continued its activities in terms of admissions, academics, research, parent-teacher interactions, placements and alumni/industry engagement. In addition, the faculty members are progressively engaging themselves in strengthening the research, IPR and consultancy activities by simultaneously interacting with the outside world and upgrading themselves to be at par with the technological developments.

The contributions of students and staff of MCA will continue to add value to the institution. The intake of MCA programme has been increased from the academic year 2023-24 from present 60 to 120 and we are all looking forward to contribute even better to the field of IT through this by creating competent professionals. We ensure that the same quality of content delivery and infrastructure facilities are provided for the increased intake.

Finally, I thank the staff and students for their commitment and contributions in making the MCA programme at BMSIT&M lively with a rewarding learning experience.





## **BMS Educational Trust**

The history of BMS Institutions dates back to the year 1946. Late Sri B.M. Sreenivasaiah, a philanthropist and visionary, realized the importance of technical education in the country. BMS College of Engineering which was started in the year 1946 has the distinction of being the first private engineering college in the country. Sri B.M. Sreenivasaiah was conferred with the title 'Dharmaprakasha Rajakaryaprasakta' by the Maharaja of Mysore for his great service in the education sector. The inheritors of his legacy continue to cherish and uphold his vision and ideals.

After Sri B.M. Sreenivasaiah, his illustrious son Sri B.S. Narayan, a dynamic and enterprising personality, developed BMS College of Engineering into one of the finest engineering colleges. He was responsible for the creation of BMS Educational Trust (BMSET) under which he established other institutions of higher education including BMS College of Law, BMS College for Women and BMS Evening College of Engineering. He was instrumental in initiating several collaborative programs such as cross-cultural programs with M/s Melton Foundation Co-operation Division. After Sri B.S. Narayan, the affairs of the BMS Institutions are being effectively managed by The Council of Trustees appointed by Dr. B.S. Ragini Narayan, wife of Late Sri B.S. Narayan, the Chairperson, the Donor Trustee & Member Secretary of BMS Educational Trust.





# BMS Institute of Technology and Management

(An Autonomous Institution, Affiliated to VTU, Belagavi)  
Avalahalli, Doddaballapura Main Road, Yelahanka, Bengaluru-560064



## Vision

*To emerge as one of the finest technical institutions of higher learning to develop professionals who are technically competent, ethical and environment friendly for betterment of society.*

## Mission

*Accomplish stimulating learning environment through high quality academic instruction, innovation and industry-institute interface.*

BMS Institute of Technology & Management established in the year 2002-03, is one of the ten educational institutions under the BMS Educational Trust recognized by AICTE, New-Delhi and affiliated to Visvesvaraya Technological University, Belgaum. The institution offers 9 UG, 3 PG and 11 Research Centers. The institution has been conferred the autonomous status from 2021-22.

The Institute is located on a 22-acre lush green campus in Avalahalli, Doddaballapur Main Road, Yelahanka with the salubrious climate of Bengaluru and the serene greenery in the campus located away from the hustle and bustle of the city. The institution has grown in strength and is emerging as one of the best technical institutions in the country. Some of the companies with which the institute signed MOUs are KPIT, BOSCH, IBM, DLITHE and TEXAS Instruments. In 2022, BMSIT&M was placed in the Platinum Category by AICTE-CII Survey on industry linkages, positioned in the band of 151-300 in India by NIRF and recognised by MHRD – Innovation Council. Institution's Innovation Council (IIC) 5.0 has secured 3.5 stars and stood one among such rated institutions, and also has been ranked under Band-Performer category by ARIIA-Ranking by Ministry of Education, Government of India.



# Department of Master of Computer Applications

(Accredited by NBA, New Delhi)

## Department Vision

*To develop quality professionals in Computer Applications who can provide sustainable solutions to the societal and industrial needs*

## Department Mission

*Facilitate effective learning environment through quality education, state-of-the-art facilities, and orientation towards research and entrepreneurial skills*

### **Programme Educational Objectives (PEOs)**

PEO1: Develop innovative IT applications to meet industrial and societal needs.

PEO2: Adapt themselves to the changing IT requirements through lifelong learning.

PEO3: Exhibit leadership skills and advance in their chosen career.

### **Programme Outcomes (POs)**

**PO1:** Apply knowledge of computing fundamentals, computing specialization, mathematics and domain knowledge to provide IT solutions.

**PO2:** Identify, analyse and solve IT problems using fundamental principles of mathematics and computing sciences.

**PO3:** Design, develop and evaluate software solutions to meet societal and environmental concerns.

**PO4:** Conduct investigations of complex problems using research-based knowledge and methods to provide valid conclusions.

**PO5:** Select and apply appropriate techniques and modern tools for complex computing activities.

**PO6:** Understand professional ethics, cyber regulations and responsibilities.

**PO7:** Involve in life-long learning for continual development as an IT professional.

**PO8:** Apply and demonstrate computing and management principles to manage projects in multidisciplinary environments by involving in different roles.

**PO9:** Comprehend and write effective reports and make quality presentations.

**PO10:** Understand the impact of IT solutions on socio-environmental issues.

**PO11:** Work collaboratively as a member or leader in multidisciplinary teams.

**PO12:** Identify potential business opportunities and innovate to create value for the society and seize that opportunity.



## About the Department

**The Department of MCA is accredited by the National Board of Accreditation, New Delhi.**

The MCA programme is intended to provide a modern industry-oriented education in applied computer science, thereby focusing on providing a sound theoretical background as well as good practical exposure to students in the relevant areas.

The MCA Department was established in the year 2003 with an approved intake of 60 students which has recently been increased to 120 with an excellent Library and Laboratory facilities. At present, it has 8 well qualified, experienced and dedicated teaching staff (04 Ph.D. holders and 04 are pursuing Ph.D.) and 2 technical and one office staff members creating an amicable teaching and learning environment. The faculty members of the dept. have executed their responsibilities as coordinators/ members of the BOS/BOE under VTU, other universities and autonomous institutions as well as editorial board members / reviewers of international journals/conferences.

The department has an aggregate of 95% results in VTU examinations, secured 13 VTU Ranks and has an average placement statistic of 90% since its inception. The faculty members are involved in an array of research domains such as Network security, Cloud Computing, Data Mining, Data Science among others. The Department of MCA is also recognized as VTU Research centre and 9 internal and external candidates are pursuing their Doctoral degree under this facility and 1 candidate has been awarded with the Ph.D. Degree.

Department of MCA organises series of Technical/Expert Talks, Workshops, Industrial Visits, Alumni Interaction, Parents-Teachers' Meeting, Project Based Learning Evaluation/Exhibition, and Technical Competitions to enrich the students from different perspectives and weekly counselling through effective proctoring system to support slow learners and boost quick learners.

### **Best Practices**

The department offers electives in advanced subjects which has relevance in the industry. The department organizes delivery of partial courses (PDC) by the industry experts as adjunct faculty for several courses such as Web Programming, Java Programming, Cloud Computing, Software Testing etc. with objectives of understanding industrial application of the core and current versions of the subjects.

Department of MCA has adopted several best practices as a part of its Teaching and Learning Processes (TLP) with OBE model such as PDC, Innovative Teaching and Co-operative Learning, Continuous Evaluation, offering Value Added Courses(VAC) to enhance student





competency and make them industry ready, remedial/tutorial classes to enhance problem solving skills in critical subjects, rubrics based evaluation of seminars and project work, seminar on the topics beyond the syllabus by individual students, student-teacher joint paper publications, student/faculty internship to get exposed to contemporary skills/project works, deputing faculty members to participate in workshops/ conferences, presenting invited talks, participating as a resource person in conferences/workshops/symposiums, authoring technical books and project/problem based learning. Open short-term courses are offered at the beginning of every semester in contemporary technologies to make the students get foundational knowledge in the new technologies and make them get expertise on them throughout the semester by making them take up projects on the same. Use case based Alternative Assessment ensures the practical learning under every course.

### Faculty and Support Staff

Department of MCA is having highly qualified and well-trained faculty members who strive to impart knowledge to the students who join MCA. The department is growing step by step with its experienced and enthusiastic staff. The staff and students are performing well in academics, cultural and sports activities throughout the year.

Below is the list of faculty members and support staff with their qualification and other details.

Sl. No	Name	Qualification	Designation	Research Area
1	Dr. M. Sridevi	M.C.A., EPGP (Data Science- IIITB), Ph.D.	Assistant Professor & Head	Data Science
2	Dr. P. Ganesh	M.C.A., Ph.D.	Professor	Cloud Computing
3	Dr. Aparna K	M.C.A., M.Phil., Ph.D.	Associate Professor	Data Mining
4	Prof. Dwarakanath G V	M.C.A.	Assistant Professor	Computer Networks
5	Prof. Shivakumara T	M.C.A.	Assistant Professor	Information & Network Security
6	Prof. Reshma C R	M.C.A.	Assistant Professor	Cognitive Radio Networks
7	Prof. Nirupama B K	M.C.A.	Assistant Professor	Computer Networks
8	Prof. Venkatesh A	M.C.A.	Assistant Professor	Data Science



### Technical Staff

Sl. No.	Name	Qualification	Designation	Area of Interest
1	Mr. Shashikiran J S	Diploma - CSE	Supervisor	Computer Networks
2	Mr. Muralidhara	DCSE	Instructor	Computer Networks

### Office Staff

Sl. No.	Name	Qualification	Designation
1	Mr. Darshan V	B.Sc.	Second Division Assistant

### Accreditation status

The Master of Computer Applications program at BMSIT&M has received accreditation from the National Board of Accreditation (NBA) for the academic years 2022-23 and 2023-24. This accreditation has now been extended until 30.06.2025, increasing the original two-year period to a total of three years.

### Innovative/ Collaborative/ Cooperative teaching learning methods adopted

Cooperative and innovative learning methods like Open Ended problems, Case Study based learning, Recap of completed chapters, Project Based Learning, Quiz with interactive leader board scores, Asynchronous Learning, Case Studies with documentaries related to the courses, and Module Walkthroughs were adopted in various subjects to substitute for the gaps in online learning. They are considered as Alternative Assessment Tools (AAT) for CIE as well to keep the learning process interactive and interesting.



**Research and Development Centre – MCA – Affiliated to VTU**

<b>Department</b>	MCA		
<b>Year of Approval</b>	2016-17		
<b>Number of Research Supervisors</b>	6	<ul style="list-style-type: none"> <li>• Dr.P. Ganesh</li> <li>• Dr. Aparna K</li> <li>• Dr. Arunkumar B R</li> <li>• Dr. Niranjana Murthy</li> <li>• Dr. Jai Arul Jose G</li> <li>• Dr. Shanmuga Sundaram</li> </ul>	
<b>Number of Research Scholars</b>	11		
<b>Status of Research Work</b>	<b>Registered</b>		<b>Awarded</b>
	11		1

Sl. No.	USN	Name of the Candidate	Date of Registration	Research Supervisor
1	1BY21PMC01	Ms. Bhavana G.	15.02.2023	Dr. P. Ganesh
2	1BY21PMC02	Mrs. Lavanya N.	15.05.2023	
3	1BY22PMC01	Mr. Bhaskar H. S.	29.12.2023	
4	1BY20PMC02	Ms. Sushitha S	31.12.2021	Dr. Aparna K.
5	1BY13PEN02	Mrs. Komala R.	03.01.2014	Dr. Arunkumar B. R.
6	1BY15PEJ12	Mrs. Reshma C. R.	23.02.2015	
7	1BY18PMC01	Mr. Vinod B Maniyat	2018	
8	1MS17PEA06	Mr. Raghavendra R.	10.05.2017	Dr. Niranjana Murthy
9	1MS18PMC02	Ms. Nirupama B. K.	19.07.2018	
10	1MS19PMC05	Mr. Pradeep H. G.	04.02.2020	



11	Registered	Mrs. Sonia	App. registered on 13-06-2024	Dr. Jai Arul Jose G.
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### Staff Recognition

- Prof. Shivakumara T, Assistant Professor, Department of MCA received his doctoral degree at the 23rd VTU convocation held on 07.03.2024 at VTU, Belagavi for his thesis titled “Dynamicaly Configurable Document Model to Prevent Data Leakage” to VTU under the guidance of Dr. Rajashekhar M Patil.
- Dr. P. Ganesh, Professor, MCA is inducted as Member, Board of Studies(BoS), Department of MCA, Bapuji Institute of Engineering & Technology, Davanagere, an autonomous institution affiliated to VTU, for the academic years 2024-25 to 2026-27.
- Dr. M. Sridevi, Assistant Professor & Head, Department of MCA, has successfully completed Executive PG Programme in Data Science by IIIT-Bangalore and participated in one-week Immersion Program at the School of Computer Science and Mathematics, John Moores University, Liverpool, UK, under which she will be guided in further research.



**Dr. M. Sridevi receiving the certificate from Dr. Hoshang Kolivand, Reader, LJM U**



- Dr. Aparna K, Associate Professor, Department of MCA attended the BoS meeting on 02.03.2024 at Department of Master of Computer Applications, M.S. Ramaiah Institute of Technology, Bengaluru.
- Dr. Aparna K, Associate Professor, Department of MCA, was invited as the External BoE member for the BoE Meeting held at Department of MCA, Nitte Meenakshi Institute of Technology, Bengaluru, on 07.05.2024.
- Dr. Aparna K, Associate Professor, Department of MCA, was invited as the External BoE member for the BoE Meeting held at Department of MCA, BMS College of Engineering, Bengaluru, on 20.05.2024.
- Dr. Aparna K, Associate Professor, Department of MCA, was invited as a Session Chair for the “IEEE International Conference on Communications and Computer Science-2024 (InCCCS-2024)” jointly organized by Department of Computer Applications, Department of Electronics and Telecommunication, BMS College of Engineering and IEEE Bangalore Section during 22.05.2024 and 23.05.2024.

#### **Invited Talks delivered by faculty of the MCA**

- Dr. Aparna K, Associate Professor, Department of MCA has extended her support as resource person for 1-day workshop on “Demystifying Project Development – A Roadmap from Problem Statement to Literature Mastery” on 31.01.2024 at Sir M Visvesvaraya Institute of Technology, Bengaluru.



**Dr. Aparna as Resource Person**

- Dr. Ganesh P, Professor, Department of MCA, delivered a talk on “Introduction and Demonstration of Anuvadini Tool” in Jnanavardhana event held on 31.01.2024 at BMSIT&M.

### Out Reach Activities

- Dr. Aparna K, Associate Professor, Department of MCA was invited to attend COMSNET-2024 (16th International Conference on COMMunication Systems & NETWORKS) (Session on Women in Engineering (WiE)) along with students, on 05.01.2024, held at Chancery Pavilion Hotel, Residency Road, Bengaluru.



**Dr. Aparna K with students at COMSNET 2024**

### Book Chapters

- Prof. Dwarakanath GV published a book chapter titled “A Reconfigurable Antenna for C-Band Applications” in the book titled- Digital Convergence in Antenna Design, published by Scievenner during March 2024.
- Prof. Venkatesh A published a book chapter titled “Performance Testing for Web Applications Towards Industry Needs” in the book- Trends in Software Testing: Industry Approach, published by Scievenner during March 2024.

### Workshops/FDP organized by the Department

- A workshop was organised on 15.03.2024 from Department of MCA and Department of AI&ML in association with TNS Foundation on “Campus to Technical Careers”. From MCA Department, Prof. Venkatesh A, Assistant Professor coordinated the event. 105 students from I Semester MCA attended the event. Faculty from TNS Foundation briefed about their initiative to train students on soft skills and technical subjects like- Full Stack, DBMS etc.





**Faculty from TNS Foundation addressing MCA students**

- A Soft Skills Training was arranged by Department of MCA for the students of first Semester MCA on 06.04.2024 to make students ready to face Campus Interviews. 95 Students attended the program. Dr. Balu L, Professor, Department of MBA, BMSIT&M was the resource person for this event. Event was very useful for first semester students as it paved the way to understand the importance of Verbal Communication, Body Language, among other things.



**Dr. Balu L interacting with I Semester students**

- Department of MCA organized an invited talk on "Robotic Process Automation(RPA)" on 04.05.2024 for the students of first Semester MCA. Ms. Najwa Riyaz, RPA Consultant delivered the talk and inspired the students on basic understanding of RPA and its applications in Industry and the future outlook of RPA.



**Ms. Najwa Riyaz interacting with First Semester MCA Students**

### **Industrial Visits**

- An industrial visit was arranged by the Department of MCA for first semester to “Atal Skill Lab”, VIAT, Muddenahalli on 16.02.2023. 56 students participated in the visit accompanied by Prof. Venkatesh A, Assistant Professor and Prof. Reshma C R, Assistant Professor and Prof. Dwarakanath, Assistant Professor.



**Students at Atal Skill Lab interacting with resource person Dr. Veena**

### **Departmental Co-Curricular Activities - OBE activity**

- Value Added Course with complete hands on was conducted as part of “Block Chain Technology” course for the students of III semester MCA by Dr. Shashidhar R, Security and Block Chain expert, Samsung Research Institute, Bengaluru. Workshop gave hands-on experience to the students about installing and configuring Block Chain related software



tools and implementing the concepts of Block Chain, such as- digital wallets, security implementation, tracing the transactions etc. Event was coordinated by Prof. Venkatesh A, Assistant Professor.



**Dr. Shashidhar R delivering a session on Blockchain & Smart Contracts**

- Department of MCA organized Parent-Teacher Meet on 06.04.2024 for the students of first Semester MCA. Few Parents from across the state had come to the Department to get first-hand information about their ward. Subject Teachers and Proctors were available during the meet and discussed various aspects of the academics.



**Interaction with parents during PTM**

**Placement Information (Batch 2022-24)**

Sl.No.	USN	Student Name	Company 1	CTC
1	1BY22MC001	Abdul Mukeeth	Mphasis	4,00,000
2	1BY22MC002	Aditi V	Cloud That-2	4,00,000
3	1BY22MC005	Amisha Uday Naik	Capgemini	4,00,000
4	1BY22MC007	Anirudh Uday Parvatikar	Carl Zeiss	11,00,000





5	1BY22MC010	Chakali Pavani	In4growth Global	3,50,000
6	1BY22MC011	Chethan P	Q2 Software	30,000
7	1BY22MC012	Chiranjeevi M N	Palle Technologies	3,50,000
8	1BY22MC013	Deena R	Zinier	7,20,000
9	1BY22MC014	Deepika A H	Radiant Techsolutions	20000(BDA)
10	1BY22MC015	Dinesh Kumar A	Mphasis	4,00,000
11	1BY22MC022	Keertana	In4growth Global	3,50,000
12	1BY22MC024	Kristen George Lewis	Codeyoung	4,50,000
13	1BY22MC025	Laxmi Ks	Mphasis	4,00,000
14	1BY22MC027	Manjunath Raju S G	Cloud That	4,00,000
15	1BY22MC029	Nekkanti Bindu	Cloud That-2	4,00,000
16	1BY22MC030	Nikhil G	In4growth Global	3,50,000
17	1BY22MC032	P Nikitha	Radiant Techsolutions	20000(BDA)
18	1BY22MC035	Prakruthi .C	Palle Technologies	3,50,000
19	1BY22MC038	Radhika B H	Q2 Software	3,60,000
20	1BY22MC039	Rakshith M	Fidelity	9,00,000
21	1BY22MC040	Ritesh Singh	Teachnook	9,00,000(BDA)
22	1BY22MC044	Sarvesh M	Palle Technologies	3,50,000
23	1BY22MC047	Shashank Katti	Teachnook	9,00,000(BDA)
24	1BY22MC048	Shreya Santosh Naik	Global Quest Technologies	3,50,000
25	1BY22MC051	Sunidhi Ritti	Fidelity	9,00,000
26	1BY22MC052	Tejas D V	Teachnook	9,00,000(BDA)
27	1BY22MC055	Varsha R	Fidelity	9,00,000
28	1BY22MC057	Varshini J M	Capgemini	4,00,000
29	1BY22MC058	Vijeth M	Rinex Technologies	5,20,000(B DA)
30	1BY22MC059	Vikrant Kumar	Teachnook	9,00,000(BDA)
31	1BY22MC008	Arjun B	TCS	4,00,000

### Odd Semester Toppers – 2023-24

#### I SEMESTER – 2023-25 BATCH

Semester	USN	Student Name	SGPA
I	1BY23MC054	Nisha A N	9.46
	1BY23MC050	Nagesha	9.38



	1BY23MC048	Meghana H	9.29
	1BY23MC082	Shreya	9.21
	1BY23MC076	Samhit Prakash Nayak	9.17
	1BY23MC027	Ganavi T V	9.08

### III SEMESTER – 2022-24 BATCH

Semester	USN	Name	SGPA
III	1BY22MC057	Varshini J M	9.08
	1BY22MC050	Soundarya	8.88
	1BY22MC013	Deena R	8.85
	1BY22MC035	Prakruthi C	8.85
	1BY22MC005	Amisha U Naik	8.77
	1BY22MC012	Chiranjeevi M N	8.77
	1BY22MC025	Laxmi K S	8.77
	1BY22MC038	Radhika B H	8.77
	1BY22MC039	Rakshith M	8.77

### Alumni Interaction

- Department of MCA has conducted a workshop on “Coding Skills” on 20.01.2024 for the students of III semester MCA. This workshop gave an exposure to the students on real-time problems that may arise while working in the industry. The activity was monitored and evaluated by the alumni students. Thus students got an opportunity to discuss with alumni, who briefed about how to approach towards problem solving.



Alumni during the assessment process under coding skills event



# **EDITORIAL COMMITTEE**

## **Chief Editor**

**Prof. Ashwitha K  
(Assistant Professor)**

## **Compilation**

**Mr. Shashi Kiran J S  
(Supervisor)**

## **Student Coordinator**

**Mr. Yogin N C  
(I Semester MCA)**





## **Understanding the Role of Coding in Information Technology**

Considered the backbone of information technology, coding plays a vital role in web development and various technological solutions.

Coding enables a computer programmer to tell computers how to perform specific tasks and solve complex problems. By writing lines of computer code, IT professionals can build innovative solutions that enhance business efficiency, streamline processes, and drive digital transformation.

The ability to instruct computer systems is a versatile, meaningful skill that enables programmers to harness the power of technology and create solutions that address real-world challenges. IT professionals can develop software applications that automate repetitive tasks, analyze large datasets, and enable seamless communication between different systems.

“Many critical solutions needed today are in the skills of the coder.”

Dr. Novadean Watson-Williams,  
Department Chair  
American Public University

### **Contact Us:**

**Department of MCA**

**Dr. M Sridevi , HoD**

 **9035358066 / 080-68730419**

 **hod\_mca@bmsit.in**

 **www.bmsit.ac.in**

