Message from Director

ABESEC is a center of learning where young talent is nurtured in different fields of engineering. The major emphasis is on imparting technical training to encourage curiosity and innovativeness among the students and the foundation from where they can acquire quick learning ability and adaptively with the fast changing needs of the industry. The institute continues to strive to meet the mission to mould you thin to world-class technocrats of tomorrow who would endeavor to increase the quality of life for human kind. The goal is to position the engineering graduates to be problem solvers, project leaders, communicators and ethical citizens of a global community. I hope this newsletter will bridge the gap between achievement sand publicity. All the credit and thanks goes to the department head and all the dedicated faculty members for encouragement towards great team work.

Prof. (Dr.) Vijay Athavale

Message from HOD-MCA

The department of MCA at ABESEC has always been thinking about its academics as well as effective contributors to the society and nation. Students are provided numerous opportunities to participate in different co- curricular activities. The strongest base of the department is our faculty members and their hard work which ensures that students must inculcate strong values based on outcome based education along with good interpersonal skills. Students are nurtured to face the challenges willingly. Many achievements have been recorded by the department since 2000.

Prof. (Dr.) Pankaj Kumar Sharma

Message from Editor

It's my immense pleasure that I was given the opportunity to work on the first issue on Vol. 1 of the department Magazine **'The Connect'**. As we know, a magazine mirrors a department & its Vision & Mission. It also highlights events, activities and academic achievements of the students and faculty members. In this issue, we have tried to include last six months achievements and the activities, projects, publications and technical events. I would like to thank to my colleagues and the students for their endless support in creation of this issue. I will hope that this magazine will give message for motivation to the students to use it as a platform to present their creativity.

Mr. Parul Kundra
Sr. Assistant Professor

Vision

The Department of MCA will strive to become a recognized centre of excellence in education and research in the field of computer applications, producing highly competent, dedicated and industry-ready professionals steeped in ethical values.

Mission

The department of MCA will provide its students and faculty a learning environment for innovative-learning, research based innovation that will infuse students with

- a passion to excel professionally.
- a spirit to be of use to industry, corporate sector and the society at large.
- an intense desire to innovate and explore new ideas & be ready to take on challenging responsibilities and leadership roles.
- a craving to be wholesome good human being.

Program Educational Objectives

The Detailed Program Educational Objectives (PEOs) are as follows-

PEO-1: Graduates of the programme will have successful technical and professional careers.

PEO-2: Graduates of the programme will continue to learn and to adapt in a world of constantly evolving technology.

PEO-3: Graduates of the programme will display high ethical standards and be good citizens.

Program Outcomes

The detailed Program Outcomes (POs) are as follows-

PO-1: Computational Knowledge : Apply knowledge of computing fundamentals, computing specialization, mathematics, and domain knowledge appropriate for the computing specialization to the abstraction and conceptualization of computing models from defined problems and requirements.

PO-2: Problem Analysis : Identify, formulate, research literature, and solve complex computing problems reaching substantiated conclusions using fundamental principles of mathematics, computing sciences and relevant domain disciplines.

PO-3: Design /Development of Solutions: Design and evaluate solutions for complex computing problems, and design and evaluate systems, components, or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

PO-4: Conduct investigations of complex Computing 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.

PO-5: Modern Tool Usage : Create, select, adapt and apply appropriate techniques, resources, and modern computing tools to complex computing activities, with an understanding of the limitations.

PO-6: Professional Ethics : Understand and commit to professional ethics and cyber regulations, responsibilities and norms of professional computing practices.

PO-7: Life-long Learning : Recognize the need, and have the ability, to engage in independent learning for continual development as a computing professional.

PO-8: Project management and finance: Demonstrate knowledge and understanding of the computing and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO-9: Communication Efficiency : Communicate effectively with the computing community, and with society at large, about complex computing activities by being able to comprehend and write effective reports, design documentation, make effective presentations, and give and understand clear instructions.

PO-10: Societal and Environmental Concern: Understand and assess societal, environmental, health, safety, legal, and cultural issues within local and global contexts, and the consequential responsibilities relevant to professional computing practices.

PO-11: Individual and Team Work : Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary environments.

PO-12: Innovation and Entrepreneurship: Identify a timely opportunity and using innovation to pursue that opportunity to create value and wealth for the betterment of the individual and society at large.

Programme Specific Outcomes (PSO)

The detailed Programme Specific Outcomes (PSOs) are as follows-

PSO-1: The ability to design and develop computing systems using the concepts of mathematics, computer engineering and other related disciplines to achieve customer goals.

PSO-2: The ability to test and analyse the quality of various subsystems and to integrate them in order to evolve a larger computing system.

Faculty Publications

1. Dr. Pankaj Kumar Sharma, "Graphical Analysis of Information and Communication Technology in Applications", in System Modeling Simulation & Intelligent Computing (ICSMSIC 2019) held on 8 - 9 March 2019, at ABES Engineering College, Ghaziabad. Published in Scopus International Journal of Innovative Technology and Exploring Engineering (IJIITEE) ISSN: 2278-3075, Volume-8 Issue-6S, April 2019.

2. Dr. Pankaj Kumar Sharma, Surbhi Sharma, Anjaly Chauhan, "Novel Pattern Classification Techniques for Web Mining" on System Modeling Simulation & Intelligent Computing (ICSMSIC 2019) held on 8 - 9 March 2019, at ABES Engineering College, Ghaziabad. Published in Scopus International Journal of Innovative Technology and Exploring Engineering (IJIITEE) ISSN: 2278-3075, Volume-8, Issue-7S, May 2019, Page 143-145.

3. Dr. Pankaj Kumar Sharma, Balmeet Kaur, A Study on Customer Segmentation using Integrated Novel Approach" in International Conference on System Modeling Simulation & Intelligent Computing (ICSMSIC 2019) on held on 8-9 March2019 held at ABES Engineering College, Ghaziabad. Published in Scopus Journal: International Journal of Innovative Technology and Exploring Engineering (IJIITEE) ISSN: 2278-3075, Volume-8 Issue-6S, April 2019 page 770-772.

4. Dr. Pankaj Kumar Sharma, Dr. Ashok K. Sinha, "Intelligent MANET system model for throughout improvement & prevention of Anomaly in MANET" presented paper in International Conference on System Modeling Simulation & Intelligent Computing (ICSMSIC 2019) on 8-9 March 2019, held at ABES Engineering College, Ghaziabad. Published in Scopus Journal: International Journal of Innovative Technology and Exploring Engineering (IJIITEE) ISSN: 2278-3075, Volume-8 Issue-6S, April 2019 page 641-644.

5. Dr. Pankaj Kumar Sharma, Dr. Vijay Athavale, Ashok K. Sinha "Development of Delay Controller System Model in MANET" published in SCOPUS indexed journal, International Journal of Innovative Technology and Exploring Engineering' at Volume-8 Issue-5, March 2019.

6. Dr. Pankaj Kumar Sharma, "Model for detection and prevention of MANET anomalies" in SCOPUS indexed Journal International Journal of Innovative Technology and Exploring Engineering (IJITEE), ISSN: 2278-3075, Volume-8 Issue-4, February 2019.

7. Devendra Kumar et al "Information Retrieval in Computing" published and presented a paper in 3rd IEEE International Conference on Intelligent Computing and Control Systems (ICICCS 2019) held at Vaigai College of Engineering on 15-71 May, 2019 (Scopus Indexing).

8. Tarun Kumar Sharma & Rajesh Kumar Maurya "Estimation of Major Agricultural Crop with Effective Yield Prediction using Data Mining" published a paper in International Conference on System Modeling Simulation & Intelligent Computing (ICSMSIC 2019) held at ABES Engineering College on 08 & 09 Mar, 2019. (Scopus Indexing)

9. Rajesh Kumar Maurya et al "Experimental Analysis of String Matching Algorithms in Document Clustering" Published in Volume-8, Issue-6S of April 2019 in IJITEE (ISSN No.:2278-3075) (Scopus Indexing)

10. Devendra Kumar et al "An Approach to design E-Wallet as Centralized E-Wallet" in 'International Journal of Engineering and Advanced Technology (IJEAT)' Volume-8 Issue-3, February 2019(Accepted) (Scopus Indexing) ISSN 2249-8958 .

11. Parul Kundra et al, "Digital Image Edge Detection through cellular automata" International Conference on System Modeling Simulation and Intelligent Computing(ICSMSIC-2019), Organized by Department of Computer Applications & department of Information Technology, ABES Engineering College, Ghaziabad, India on February 08-09, March 2019. International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-7S2, May 2019(Scopus Indexing).

12. Vinod Kumar et al, "Digital Image Edge Detection through cellular automata" International Conference on System Modeling Simulation and Intelligent Computing(ICSMSIC-2019), Organized by Department of Computer Applications & department of Information Technology, ABES Engineering College, Ghaziabad, India on February 08-09, March 2019. International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-7S2, May 2019) (Scopus Indexing).

Workshop and Guest Lectures

Department of Computer Applications has organized various workshops & lectures. Some of which are as follows-

1. Guest Lecture on Machine Learning By Dr. Pradeep Kumar (Associate Professor, Department of Computer Science & Information technology at Maulana Azad National Urdu University, Hyderabad) on 17.01.2019 .

2. Guest Lecture on Machine Learning and its real life applications on 08.02.2019 for faculty and students by Dr. A.K. Sinha (Director, UST Technologies Pvt. Ltd.).

3. Workshop on Networking for students of MCA I and II year on 01 Feb 2019 By Mr. Siddharth Tiwari (Sr. Networking Trainer) from Network Bulls Gurgaon, where he explained various networking concepts and demonstrated the practical in front of students.

4. Guest lecture by an industry expert, for Students/ Faculty on the topic "Recent Technology Trends- a Perspective ". The lecture was delivered by Dr. Venkateshwaram, Senior Vice President, IOT solutions, Persistent Systems Limited, Pune. Dr. Venkateshwaram has addressed the students and discussed the future scope of "IOT".

Areas of discussion were: Basics of IOT, Importance of IOT, Simplistic, yet powerful Representation of IOT, Internet of things is different from the Internet of People, Future development in IOT, *Enabling technologies for IOT* Dr. Venkateshwaram had an interactive QA session wherein the students quizzed him on several issues ranging from the basics, technology aspects of IoT, applications to a common man.   He also added some real time examples related to IOT like the concept behind TESLA CAR with a goal to build autonomous vehicles, it's no surprise that Tesla has heavily invested in IoT and Artificial intelligence. It has been explained how railway tracks are being checked using IOT devices which in turn save time and manpower. This lecture was very useful for students to know about the current leading trends in the IT industry.

Dr. Pankaj Sharma honoured to Dr. A. K. Sinha

Dr. Venkateshwaram, Senior Vice President, IOT Solutions, Persistent Systems Limited, Pune, HOD MCA

Technical Aptitude Enhancement Week

Department of Computer application under the supervision of Prof.(Dr.) Pankaj Kumar Sharma organized a Technical Aptitude Enhancement week from 14 Jan to 18 Jan 2019 where students have undergone rigorous training on Technical(C & DS, JAVA, Web Development, Data Science using Python and Block Chain) and Aptitude. The main vision behind such training was to enhance the overall skills of students through continual learning to produce quality engineers.

On Successful completion of the above training HOD MCA incorporated Technical classes as a regular part of time table under which C, DS, JAVA & Web Development Classes were taken by Mr. Tarun Kr. Sharma, Mr. Vinod Kumar, Ms. Balmeet Kaur and Mr. Chandra Mani, where each subject was given 36 to 40 hours of Training during the entire semester.

Industrial Visits

An industrial visit for second year students of MCA Department was organized to **Deki Electronics,** Noida on 25th & 26th February 2019.

Deki Electronics is the largest manufacturer& supplier of Film Capacitors, Plastic Film Capacitors, Mylar Capacitor, Pulse Capacitors and Power Capacitors in India. MCA students visited the company and gained knowledge related to manufacturing of different types of capacitors and experienced the manufacturing process controlling with Programmable Logic Controllers etc.

MCA students along with Faculty members at Deki Electronics, Noida

Faculty Members as a Resource Person

Under the zonal program of leading India.ai Prof. (Dr.) Pankaj Kumar Sharma conducted various workshop on Big Data Analytics across around pan India which are as follows-

Prof. (Dr.) Pankaj Kumar Sharma conducted workshop on Big Data Analytics at NIT Arunachal Pradesh

Prof.(Dr.) Pankaj Kumar Sharma conducted workshop on Big Data Analytics at GIMT, Guwahati, Assam.

Prof.(Dr.) Pankaj Kumar Sharma conducted workshop on Big Data Analytics at Sri Vasani Engineering College. Tadepalligudem

Prof. (Dr.) Pankaj Kumar Sharma conducted workshop on Big Data Analytics at FRC Rodrigues Institute of Technology, Mumbai

Successful Completion of NPTEL Courses

Faculty members and students have registered & qualified on various courses run by NPTEL few of them are as follows-

By Faculty members

1.	Dr. Pankaj Kumar Sharma (HoD)	Big Data Analytics
2.	Dr. Devendra Kumar	Teaching And Learning in Engineering
3.	Mr. Rajesh Kumar Maurya	Research Methodology
4.	Mr. Tarun Kumar Sharma	Research Methodology
5.	Mr. Parul Kundra	C Programming
6.	Mr. Vinod Kumar	C Programming
7.	Ms. Kalpana Dwivedi	DBMS, Big Data Computing
8.	Mr. Rishabh Jain	Teaching And Learning in Engineering

By Students-

1. Nikita Garg   2. Siddharth Verma   3. Nishchal Vashisht   4. Shivam Birmani   5. Himanshu Gupta

Course Name : Programming in Java

Student Achievement

Director Gold Medal Award Received by Km. Nikita Garg (MCA 2ndyr)

Director Gold Medal Award Received by Akshay Rajput (MCA 2ndyr)

Faculty Development Program

Organized

Department of Computer Applications has organized FDP which are as follows-

1. Dept. of MCA & CBSE (Center for Building Skills for Employability) has organized a 6 weeks Technology Entrepreneurship Development Programme *on* "Mobile Phone Application Development & E-Commerce based Business Models" *from* 12th Feb-23rd March'19. The programme is sponsored by NSTEDB, Department of Science & Technology, Govt. of India.

2. The Department of MCA and the Department of Information Technology has jointly organized an ICT based Short Term Training Programme on "Development of Laboratory Instruction and Manual" from 04-08 February 2019 sponsored by NITTTR Kolkata.

Details of Program were:

1. Introduction to Laboratory Instruction and Manual
2. The Role of Laboratory in Technical Education
3. Development of Laboratory Exercise and Preparation of Laboratory Report
4. Common Hazards in Laboratory
5. Introduction to Safety Management in Laboratory
6. Safe Operating Procedure (SOP) for Laboratory Activities
7. Effective Laboratory Instruction and Manual
8. Assessing Student Learning for Laboratory Activities

Alumini Interaction

Department of Computer Applications has organized Alumini interactions which are as follows-

1. Department of MCA in association with ABESEC Alumni Association has organized an Alumni Interaction on 25.01.2019 for MCA students. Mr. Junaid Basheer, Jr. Statistical Assistant, Govt. of Jammu & Kashmir has taken a session on preparing of Govt. Jobs.

2. Department of MCA in association with ABESEC Alumni Association has organized an Alumni Interaction on 30.03.2019 for MCA students. **Mr. Sameer Srivastava,** Technical Officer (T5), Ministry of Home Affairs, Under Ministry of Agriculture and Farmers Welfare, Krishi Anusandhan Bhawan -1, Pusa Campus, New Delhi-110012.

International Conference

The Department of Computer Applications & Department of IT have jointly organized AKTU sponsored International Conference on **System Modeling Simulation & Intelligent Computing (ICSMSIC 2019) on 8th & 9th March** held at ABES Engineering College, Ghaziabad. In this conference more than 300 participants were registered to present their research papers.

Day 1: Dr. Dipankar Das Gupta, IEEE Fellow, ACM Distinguished Speaker Director, Center for Information Assurance, William Hill Professor of Computer Science the University of Memphis, TN 38111, USA was key note speaker of the conference.

Technical talks: Dr. AK.Sinha , Director (UST Pvt .Ltd.) **Mr. Ankit Arora,** Chief Technology Speaker Xsol Pvt. Ltd. **Mr. Piyush Agrawal,** CEO, Paper Byte

Total 100+ research papers were received in the conference only 25 % of good quality papers were selected for presentation and publication. All the authors (faculty/scholars) were given chance to present their papers during Day1 and Day 2 and few were given chance through Skype.

Day 2: The speakers of the sessions in this conference were eminent researchers in the field of research. Guest speakers were invited from abroad to deliver sessions and motivate our students as well as faculty members for taking up research projects in the prominent and potential research areas. The distinguished speakers of the session were:

1. **Mohamed Slim Alovini**
   King Abdullah University of Science and Technology, Saudi Arabia.
2. **Dr. Mansaf Alam**
   Associate Professor & Young Faculty Research Fellow, DietY, Govt. of India, Department of Computer Science, Jamia Millia Islamia, New Delhi, India.

Tech Forum: A research poster presentation on various technical topics, various students from different college participated in this event.

International Conference-ICSMSIC 2019

Vivek Singh, Swapnil Srivastava and Archit Gupta Receiving First Prize in Poster Presentation ICSMSIC

Farewell of MCA 2019 Batch
Hasta La Vista'19

Department of MCA bids farewell to 2019 Batch on 01 June 2019. This farewell was organized under the guidance of Prof. (Dr.) Pankaj Kr. Sharma, HoD MCA, welcomed all the final year students and motivated them to work hard and achieve all the goals of life & also appreciated pre final year students for their efforts in organizing farewell party in such short span of time .

Students of 2020 batch organized various cultural events, apart from that the final year students also showcased their talent by participating in ramp walk, singing, dancing etc. The event was coordinated by Shubhangi, Nikita, Shiva and Kanahiya of MCA pre final year. Mr. Parul Kundra and Ms. Surbhi Sharma were faculty coordinators.

Group Photograph of MCA Final year students with the Faculty members of MCA

Workshop On Big Data And Hadoop

MCA department at ABES Engineering College had organized a one day workshop on Big Data and Hadoop on 20/05/2019 .The objective of this workshop was:

1.   To provide the students with an insight into the various concepts of Big Data through Industry Perspective to bridge the gap between industry and academia.

2.   To provide an opportunity to the students to learn about the concepts from an expert so that they can think about their future in this area.

The workshop was especially for undergraduates students in order to enhance their skills in emerging technologies Big Data, NOSQL etc. Students from different college like HRIT Ghaziabad, HI-TECHGhaziabad,SD CollegeMuzaffarnagar, IIMT Greater Noida doing BCA, BSc (Computer Science) had attended the workshop.

Prof. Pankaj Kumar Sharma delivered a workshop. The Workshop was started with a brief introduction to Big Data. Prof. Sharma discussed Big Data applications as per the industry need. He gave the students a detailed informative look into the No-SQL database technologies and Hadoop too (HDFS and Map reduce) with the different organizations who have created or use a form of Hadoop. All the participants got exposure about Big Data as technologies like Hadoop and Mongo DB.

All the attendees were awarded with participation certificate. Top 3 students were offered one-month internship within the campus on advanced technology

Students received appreciation certificate during workshop on Big Data and Hadoop from HOD, MCA

PAID INTERNSHIPS 2019

10 MCA second-year students.
First time in any Delhi-NCR College

MCA Department

Our Patrons

Chief Patrons
Sh. Neeraj Goel
President

Sh. Sachin Goel
Vice President

Patrons
Prof. Vijay Athawale
Director

Prof. Gajendra Singh
Dean Academics

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