

PROPHECY

TECHNICAL MAGAZINE



DEPARTMENT OF
COMPUTER SCIENCE & ENGINEERING

Academic Year - 2021-2022



MBITS

**MAR BASELIOS INSTITUTE
OF TECHNOLOGY AND SCIENCE**
ENGINEERING & POLYTECHNIC COLLEGE

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Editorial Team

Faculty Coordinator



MINTU THOMAS
Assistant Professor
MBITS



ELBY K ELDHOSE
Assistant Professor
MBITS

We are happy to introduce you to our department technical magazine. I take technical magazine as an opportunity to highlight the projects, seminar topics that the students undertake enhancing their knowledge. Through projects that students execute it provides opportunity and platform for the young students to showcase their talent which can even be beneficial to any or all others to boost their technical knowledge. I believe that this magazine serves the purpose.

Student Coordinator



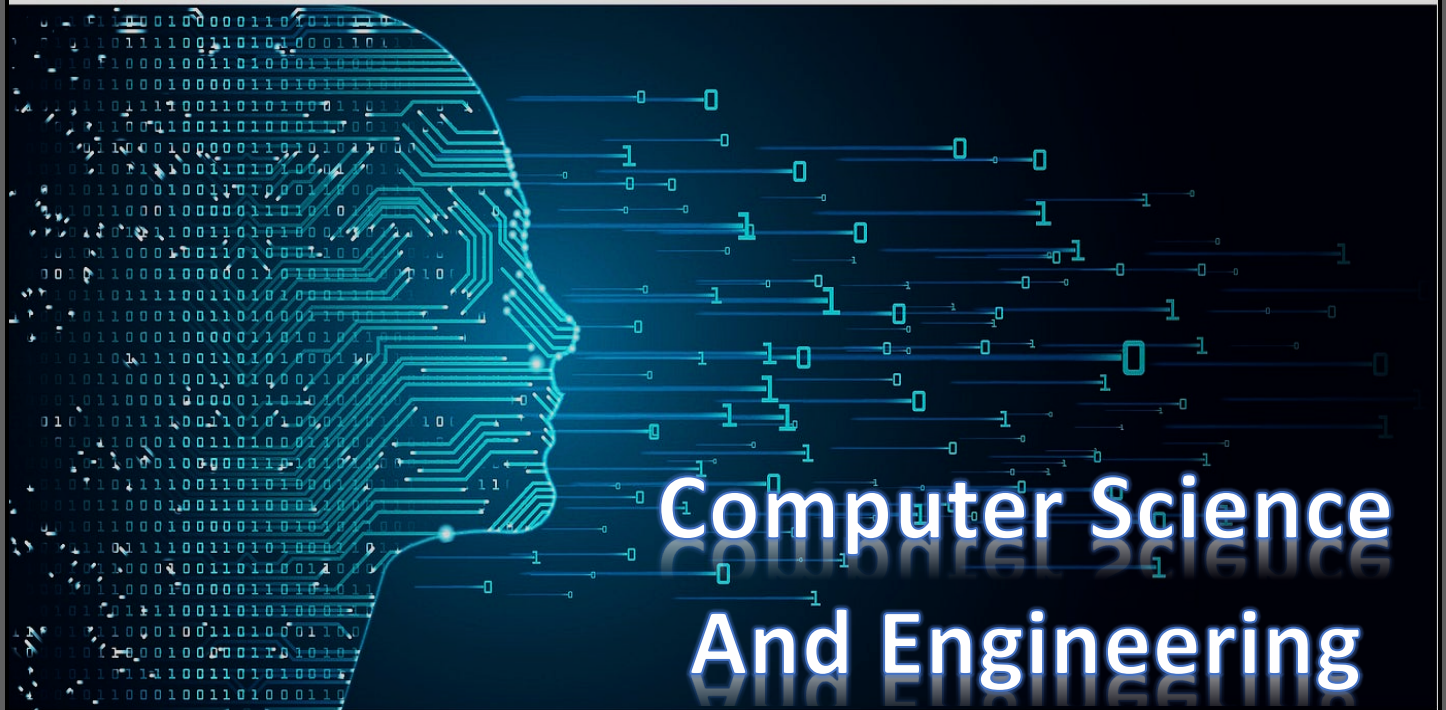
Aleena Eldhose,
3rd Year CSE



Rida Mariya Rajan,
3rd Year CSE



SL NO	Content	Page No
1	Vision And Mission	3
2	Program Education Objectives (PEO)	4
3	Program Specific Outcomes (PSO)	4
4	Program Outcomes (PO)	5
5	Message From Hod CSE – 2022	6
6	Modern Technology	7
7	Placement Details	22
8	Google ACE From ASAP	22
9	Education 4.0 Implementation Committee	23
10	Rebuild Kerala	24
11	Infosys Certification Course In 5G	24
12	Computer Science Association (CYBORGS)	25



Computer Science And Engineering



◆ *To empower the students to be competent computer professionals.*

- ◆ *Cartel with quality education in the concept of computer science to solve real-world problems.*
- ◆ *Support students to become professionally and morally adroit engineers.*
- ◆ *Educate younger generation in the evolving fields of computer science and technology.*





PROGRAM EDUCATION OBJECTIVES (PEO)

- PEO1:** *To prepare graduates to work productively as successful Computer professionals.*
- PEO2:** *To prepare graduates with latest skills in the field of technologies supplemented with practical orientation to face challenges of modern computing industry.*
- PEO3:** *To provide environment that fosters professional growth, communication skill, team work, life-long learning skill and ability to create awareness in society about applications of technology.*

PROGRAM SPECIFIC OUTCOMES (PSO)

- PSO1 Problem Solving and Programming Skills:** *Graduates will be able to apply computational techniques and complete individual practical experiences in a variety of programming languages and situations.*
- PSO2 Professional Skills:** *Graduates will be able to design and develop efficient and effective software by following standard software engineering principles.*
- PSO3 Successful Career:** *Graduates will be able to become entrepreneur and to pursue higher studies / career in IT industries.*



PROGRAM OUTCOMES (PO)

Graduates will be able to

1. *Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems. [Engineering knowledge]*
2. *Identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences. [Problem analysis]*
3. *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. [Design/Development of solutions]*
4. *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. [Conduct investigations of complex problems]*
5. *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. [Modern tool usage]*
6. *Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice. [The engineer and society]*
7. *Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development. [Environment and sustainability]*
8. *Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice. [Ethics]*
9. *Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings. [Individual and team work]*
10. *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. [Communication]*
11. *Demonstrate knowledge and understanding of the engineering 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. [Project management and finance]*
12. *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. [Life-long learning]*



MESSAGE FROM HOD CSE - 2022

Dear Students, Faculty, and Staff,

Welcome to another edition of our Department Magazine! As we reflect on the recent happenings and achievements within our vibrant community, I am filled with pride and admiration for the incredible work being done by each and every one of you.

I am particularly delighted to highlight the achievements of our students, who have once again demonstrated their exceptional talent and dedication. I would also like to extend my heartfelt appreciation to our faculty members for their tireless efforts in teaching and mentorship. Your expertise and commitment are the driving force behind our department's success, and I am grateful for the invaluable contributions you make each day.



I am happy to mention that we could increase the B.Tech intake from 60 to 120, in this academic year. As we look ahead to the future, I am confident that our department will continue to thrive and excel in the years to come. With your continued support and collaboration, there is no limit to what we can achieve together.

Thank you once again for your unwavering dedication and commitment to excellence. I am honoured to serve as the Head of the Department of Computer Science & Engineering and look forward to witnessing the continued growth and success of our department.

Warm regards,

MIDHUN MATHEW

Head of the Department Computer Science & Engineering

MBITS



Modern Technology



5G is the 5th generation mobile network. It is a new global wireless standard after 1G, 2G, 3G, and 4G networks. 5G enables a new kind of network that is designed to connect virtually everyone and everything together including machines, objects, and devices. 5G wireless technology is meant to deliver higher multi-Gbps peak data speeds, ultra-low latency, more reliability, massive network capacity, increased availability, and a more uniform user experience to more users. Higher performance and improved efficiency empower new user experiences and connects new industries.



ELBY K ELDHOSE
Assistant Professor
MBITS

Broadly speaking, 5G is used across three main types of connected services, including enhanced mobile broadband, mission-critical communications, and the massive IoT. A defining capability of 5G is that it is designed for forward compatibility—the ability to flexibly support future services that are unknown today.

Enhanced Mobile Broadband

In addition to making our smart phones better, 5G mobile technology can usher in new immersive experiences such as VR and AR with faster, more uniform data rates, lower latency, and lower cost-per-bit.

Mission Critical Communications

5G can enable new services that can transform industries with ultra-reliable, available, low-latency links like remote control of critical infrastructure, vehicles, and medical procedures.

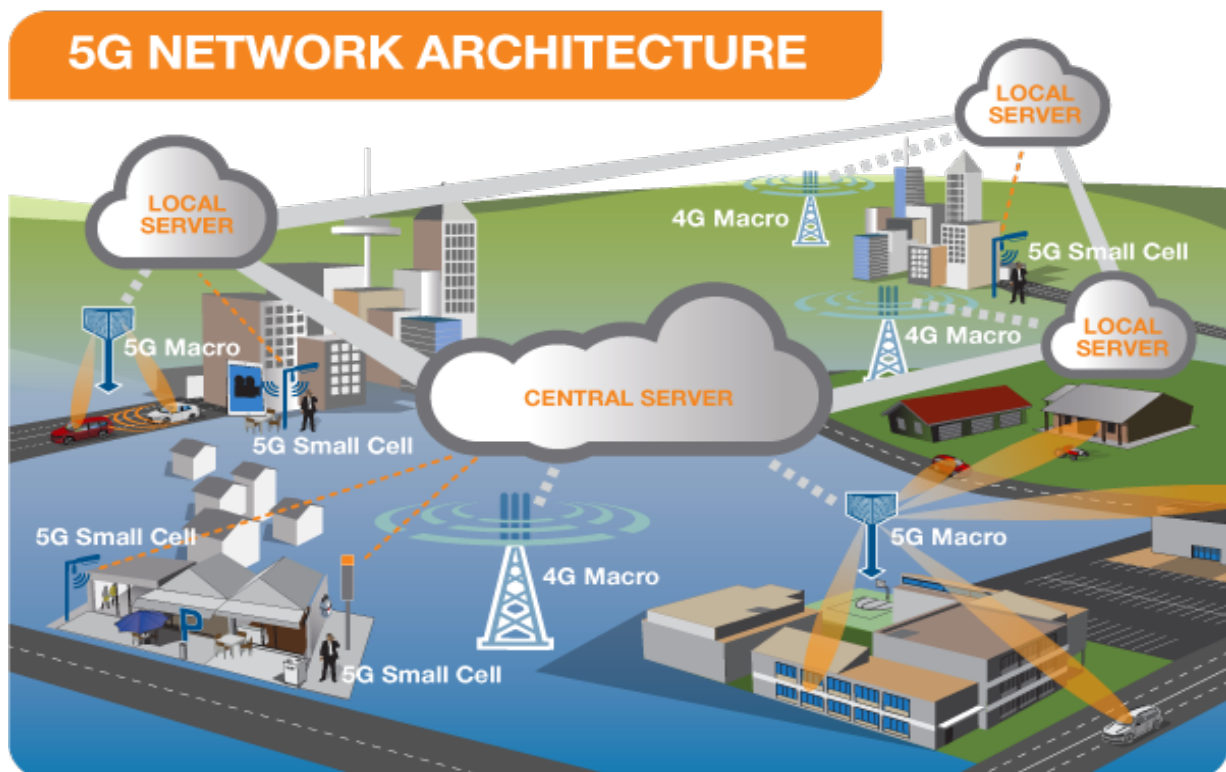
Massive IoT

5G is meant to seamlessly connect a massive number of embedded sensors in virtually everything through the ability to scale down in data rates, power, and mobility—providing extremely lean and low-cost connectivity solutions.

5G is designed to deliver peak data rates up to 20 Gbps based on IMT-2020 requirements. Qualcomm Technologies' flagship 5G solutions, the Qualcomm® Snapdragon™ X65 is designed to achieve up to 10 Gbps in downlink peak data rates.

But 5G is about more than just how fast it is. In addition to higher peak data rates, 5G is designed to provide much more network capacity by expanding into new spectrum, such as mmWave.

5G can also deliver much lower latency for a more immediate response and can provide an overall more uniform user experience so that the data rates stay consistently high—even when users are moving around. And the new 5G NR mobile network is backed up by a Gigabit LTE coverage foundation, which can provide ubiquitous Gigabit-class connectivity.





Edge computing optimizes Internet devices and web applications by bringing computing closer to the source of the data. This minimizes the need for long distance communications between client and server, which reduces latency and bandwidth usage.



MINTU THOMAS

Edge computing is a networking philosophy focused on bringing computing as close to the source of data as possible in order to reduce latency and bandwidth use. In simpler terms, edge computing means running fewer processes in the cloud and moving those processes to local places, such as on a user's computer, an IoT device, or an edge server. Bringing computation to the network's edge minimizes the amount of long-distance communication that has to happen between a client and server.

For Internet devices, the network edge is where the device, or the local network containing the device, communicates with the Internet. The edge is a bit of a fuzzy term; for example a user's computer or the processor inside of an IoT camera can be considered the network edge, but the user's router, ISP, or local edge server are also considered the edge. The important takeaway is that the edge of the network is geographically close to the device, unlike origin servers and cloud servers, which can be very far from the devices they communicate with.

Consider a building secured with dozens of high-definition IoT video cameras. These are "dumb" cameras that simply output a raw video signal and continuously stream



that signal to a cloud server. On the cloud server, the video output from all the cameras is put through a motion-detection application to ensure that only clips featuring activity are saved to the server's database. This means there is a constant and significant strain on the building's Internet infrastructure, as significant bandwidth gets consumed by the high volume of video footage being transferred. Additionally, there is very heavy load on the cloud server that has to process the video footage from all the cameras simultaneously.

Now imagine that the motion sensor computation is moved to the network edge. What if each camera used its own internal computer to run the motion-detecting application and then sent footage to the cloud server as needed? This would result in a significant reduction in bandwidth use, because much of the camera footage will never have to travel to the cloud server.

Additionally, the cloud server would now only be responsible for storing the important footage, meaning that the server could communicate with a higher number of cameras without getting overloaded. This is what edge computing looks like.

The first computers were large, bulky machines that could only be accessed directly or via terminals that were basically an extension of the computer. With the invention of personal computers, computing could take place in a much more distributed fashion. For a time, personal computing was the dominant computing model. Applications ran and data was stored locally on a user's device, or sometimes within an on-premise data centre.

Cloud computing, a more recent development, offered a number of advantages over this locally based, on-premise computing. Cloud services are centralized in a vendor-managed "cloud" (or collection of data centres) and can be accessed from any device over the Internet.

However, cloud computing can introduce latency because of the distance between users and the data centers where cloud services are hosted. Edge computing moves computing closer to end users to minimize the distance that data has to travel, while still retaining the centralized nature of cloud computing.

To summarize:

- Early computing: Centralized applications only running on one isolated computer
- Personal computing: Decentralized applications running locally
- Cloud computing: Centralized applications running in data centres



- Edge computing: Centralized applications running close to users, either on the device itself or on the network edge

Cost savings

As seen in the example above, edge computing helps minimize bandwidth use and server resources. Bandwidth and cloud resources are finite and cost money. With every household and office becoming equipped with smart cameras, printers, thermostats, and even toasters, Statistics predicts that by 2025 there will be over 75 billion IoT devices installed worldwide. In order to support all those devices, significant amounts of computation will have to be moved to the edge.

Performance

Another significant benefit of moving processes to the edge is to reduce latency. Every time a device needs to communicate with a distant server somewhere, that creates a delay. For example, two coworkers in the same office chatting over an IM platform might experience a sizable delay because each message has to be routed out of the building, communicate with a server somewhere across the globe, and be brought back before it appears on the recipient's screen. If that process is brought to the edge, and the company's internal router is in charge of transferring intra-office chats, that noticeable delay would not exist.

Similarly, when users of all kinds of web applications run into processes that have to communicate with an external server, they will encounter delays. The duration of these delays will vary based upon their available bandwidth and the location of the server, but these delays can be avoided altogether by bringing more processes to the network edge.

New functionality

In addition, edge computing can provide new functionality that wasn't previously available. For example, a company can use edge computing to process and analyse their data at the edge, which makes it possible to do so in real time.

To recap, the key benefits of edge computing are:

- Decreased latency
- Decrease in bandwidth use and associated cost
- Decrease in server resources and associated cost
- Added functionality



The Internet of Things (IoT) describes the network of physical objects—“things”—that are embedded with sensors, software, and other technologies for the purpose of connecting and exchanging data with other devices and systems over the internet. These devices range from ordinary household objects to sophisticated industrial tools. With more than 7 billion connected IoT devices today, experts are expecting this number to grow to 10 billion by 2020 and 22 billion by 2025. Oracle has a network of device partners.



Mr. Kevin P. Joseph
CTC:44L, Virtusa

Over the past few years, IoT has become one of the most important technologies of the 21st century. Now that we can connect everyday objects—kitchen appliances, cars, thermostats, baby monitors—to the internet via embedded devices, seamless communication is possible between people, processes, and things.

By means of low-cost computing, the cloud, big data, analytics, and mobile technologies, physical things can share and collect data with minimal human intervention. In this hyper connected world, digital systems can record, monitor, and adjust each interaction between connected things. The physical world meets the digital world—and they cooperate.

While the idea of IoT has been in existence for a long time, a collection of recent advances in a number of different technologies has made it practical.

Access to low-cost, low-power sensor technology. Affordable and reliable sensors are making IoT technology possible for more manufacturers.



Connectivity . A host of network protocols for the internet has made it easy to connect sensors to the cloud and to other “things” for efficient data transfer.

Cloud computing platforms. The increase in the availability of cloud platforms enables both businesses and consumers to access the infrastructure they need to scale up without actually having to manage it all.

Machine learning and analytics. With advances in machine learning and analytics, along with access to varied and vast amounts of data stored in the cloud, businesses can gather insights faster and more easily. The emergence of these allied technologies continues to push the boundaries of IoT and the data produced by IoT also feeds these technologies.

Conversational artificial intelligence (AI). Advances in neural networks have brought natural-language processing (NLP) to IoT devices (such as digital personal assistants Alexa, Cortana, and Siri) and made them appealing, affordable, and viable for home use.

Industrial IoT (IIoT) refers to the application of IoT technology in industrial settings, especially with respect to instrumentation and control of sensors and devices that engage cloud technologies. Refer to this Titan use case PDF for a good example of IIoT. Recently, industries have used machine-to-machine communication (M2M) to achieve wireless automation and control. But with the emergence of cloud and allied technologies (such as analytics and machine learning), industries can achieve a new automation layer and with it create new revenue and business models. IIoT is sometimes called the fourth wave of the industrial revolution, or Industry 4.0.

The following are some common uses for IIoT:

- Smart manufacturing
- Connected assets and preventive and predictive maintenance
- Smart power grids
- Smart cities
- Connected logistics
- Smart digital supply chains





PLACEMENT DETAILS

Outstanding Placement 2022

We are delighted to note down our record placement offer with an annual CTC of Rs 44 (forty-four) lakhs for Mr. Kevin P. Joseph, Dept. of Computer Science and Engineering (CSE), 2019-2023 Batch in Virtusa, USA.



Mr. Kevin P. Joseph
CTC:44L, Virtusa

SL NO	Employer Name	Student Name
1	Hyundai MOBIS	Albin Augustine
2	Hexaware Technology	Alen Issac
3	IBS Software	Stellamol Sabu
4		Sijina C J
5	Speridian Technology	Anna Merin Mathai
6	FedServ	Akhil Sajeevan
7	ALT-D Technologies LLP	Nimisha Nebu Johnson
8	Experion	Sreelakshmi Chandran
9	NeST Digital	Kavya Jayan
10		Milkka Mathew
11	Experis IT Pvt Ltd	Pavan Eldho Sreeba
12	ADAPTNXT Technology	Anandhu Santhosh
13	UROLIME	Aslam Asharaf
14	VVDN Technologies	Athulya K
15	Sinrorobotics Pvt Ltd	George Vincent
16	Sutherland	Krishnapriya M M
17		Aiswarya B
18	Futuronics Technology	Ebin K Jaimon



Year (2021 - 2022)

Sl. No.	Student Name	Event	Organizing Institute	State / National / International	Prize / Participation
1	Jerry Vincent	5 th National Engineering Olympiad	NEO	National	Participation
2	Abin Thankachan	Two day workshop on automotive diagnostic and tuning	IIT Varanasi	National	Participation
3	Anwin Baby	Webinar on Carrier Guidance	Techmaghi in association with Science and technology council, IIT Varanasi	National	Participation
4	Jerin Paul	Two day workshop on automotive diagnostic and tuning	IIT Varanasi	National	Participation
5	Paul Binu	Two day workshop on automotive diagnostic and tuning	IIT Varanasi	National	Participation
6	T R Roshan	Mintonette, Volley ball competition (Lumiere23)	College of Engineering, Kidangoor	National	Participation
7	Abin Thankachan	Karnak 2022 (Algorithm Unlock- Coding Challenge)	MBITS	State	First Prize
8	Aleena Anil	Karnak 2022 (Flash Pitch IEDC Event)	MBITS	State	First Prize



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9	Alphet Maria Baby	ZYGON Hackathon 21-22	St. Teresa's College, Ernakulam	State	Third Prize
10	Abhijith M	Karnak 2022 (Flash Pitch IEDC Event)	MBITS	State	Participation
11	Abhinav P A	Karnak 2022 (Keyboard Ninja)	MBITS	State	Participation
12	Abin Thankachan	Karnak 2022 (Keyboard Ninja)	MBITS	State	Participation
13	Akhil Sabu	Karnak 2022 (Dark Knight-Inter college Chess Competition)	MBITS	State	Participation
14	Aleena Anil	Karnak 2022 (Photoshop Workshop)	MBITS	State	Participation
15	Allen P Binoy	Karnak 2022 (Keyboard Ninja)	MBITS	State	Participation
16	Aleena Eldhose	Karnak 2022 (QuizWiz)	MBITS	State	Participation
17	Aleena Anil	Karnak 2022 (Dark Knight-Inter college Chess Competition)	MBITS	State	Participation
18	Anishka Susan Giby	Karnak 2022 (Keyboard Ninja)	MBITS	State	Participation
19	Arjun Saji	Karnak 2022 (Keyboard Ninja)	MBITS	State	Participation
20	Aleena Anil	Karnak 2022 (QuizWiz)	MBITS	State	Participation
21	Alphet Maria Baby	IPL Regional Level Hackathon	Rajagiri School of Engineering and Technology, Kochi	State	Participation
22	Anna Thampi	Karnak 2022 (Keyboard Ninja)	MBITS	State	Participation



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23	Anson Joju	Karnak 2022 (Photoshop Workshop)	MBITS	State	Participation
24	Ashwin Biju	Karnak 2022 (Keyboard Ninja)	MBITS	State	Participation
25	Alphet Maria Baby	Karnak 2022 (Photoshop Workshop)	MBITS	State	Participation
26	Anusree P S	Karnak 2022 (QuizWiz)	MBITS	State	Participation
27	Basil Eldhose	Karnak 2022 (PC Assembly)	MBITS	State	Participation
28	Basil Pappy Roy	Karnak 2022 (Photoshop Workshop)	MBITS	State	Participation
29	Basil Pappy Roy	Karnak 2022 (Civista- Gaming)	MBITS	State	Participation
30	Basil Varghese	Karnak 2022 (Photoshop Workshop)	MBITS	State	Participation
31	Cinta Shaji	Karnak 2022 (Photoshop Workshop)	MBITS	State	Participation
32	Merritt Shaji	Karnak 2022 (Keyboard Ninja)	MBITS	State	Participation
33	Cinta Shaji	Karnak 2022 (QuizWiz)	MBITS	State	Participation
34	Collin Francy	Karnak 2022 (Algorithm Unlock)	MBITS	State	Participation
35	Dennis James	Karnak 2022 (Algorithm Unlock)	MBITS	State	Participation
36	Dorothy Sisro Shajan	Karnak 2022 (Keyboard Ninja)	MBITS	State	Participation
37	Dhivina Giji	Karnak 2022 (Algorithm Unlock)	MBITS	State	Participation
38	Eric Joji	Karnak 2022 (Keyboard Ninja)	MBITS	State	Participation



COMPUTER SCIENCE AND ENGINEERING

39	Elson Varghese Joby	Karnak 2022 (Algorithm Unlock)	MBITS	State	Participation
40	Febin Biju	Karnak 2022 (Civista-Gaming)	MBITS	State	Participation
41	Geevarghese S Isaac	Karnak 2022 (Flash Pitch IEDC Event)	MBITS	State	Participation
42	Georgekutty Kuriakose	Karnak 2022 (Keyboard Ninja)	MBITS	State	Participation
43	Joel Jacob Thampi	Karnak 2022 (Algorithm Unlock)	MBITS	State	Participation
44	Jomin Varghese	Karnak 2022 (Keyboard Ninja)	MBITS	State	Participation
45	Kevin Joseph	Karnak 2022 (Keyboard Ninja)	MBITS	State	Participation
46	Kuruvila Jose	Karnak 2022 (Photoshop Workshop)	MBITS	State	Participation
47	Midhun Mathew	Karnak 2022 (Algorithm Unlock)	MBITS	State	Participation
48	Muhammad Raffi	Karnak 2022 (Photoshop Workshop)	MBITS	State	Participation
49	Muhammed Fardeen	UPSCALE'21	GEC Palakkad	State	Participation
50	Navneeth Krishna	Karnak 2022 (Keyboard Ninja)	MBITS	State	Participation
51	Roshan Santhosh	Karnak 2022 (Algorithm Unlock)	MBITS	State	Participation
52	Aadhil Muhammed K K	IEDC Summit	St. Joseph's College of Engineering and Technology, Palai	State	Participation
53	Abin Thankachan	CAD-A-THON	NIT Calicut	State	Participation



54	Alan Sha	IEDC Summit	St. Joseph's College of Engineering and Technology, Palai	State	Participation
55	Augnase George	Karnak 2022- LED Workshop	MBITS	State	Participation
56	Bonny Vincent	IEDC Summit	St. Joseph's College of Engineering and Technology, Palai	State	Participation
57	Eiva Merin Eldose	IEDC Summit	St. Joseph's College of Engineering and Technology, Palai	State	Participation
58	Harigovind R	Two day workshop on Deep Learning (AI)	NIT Calicut	State	Participation
59	Harigovind R	IEDC Summit	St. Joseph's College of Engineering and Technology, Palai	State	Participation
60	Jerin Paul	IEDC Summit	St. Joseph's College of Engineering and Technology, Palai	State	Participation
61	Jolsana Jaimon	IEDC Summit	St. Joseph's College of Engineering and Technology, Palai	State	Participation



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62	Rose Theresa Thankachan	Karnak 2022 (Nexus Tech Talk on Electric Vehicle)	MBITS	State	Participation
63	Rose Theresa Thankachan	IEDC Summit	St. Joseph's College of Engineering and Technology, Palai	State	Participation
64	Sandra Chandran	IEDC Summit	St. Joseph's College of Engineering and Technology, Palai	State	Participation
65	Sojan P Renny	IEDC Summit	St. Joseph's College of Engineering and Technology, Palai	State	Participation
66	Parvathi Jaimon	IEDC Summit 2022	St. Joseph's College of Engineering and Technology, Pala	State	Participation
67	Alan Binoy	IEDC Summit 2022	St. Joseph's College of Engineering and Technology, Pala	State	Participation
68	Amitha K S	Karnak 2022 (Keyboard Ninja)	MBITS	State	Participation
69	Gokul G Nair	TATHVA'22 (Workshop on Cryptocurrency & Blockchain)	NIT Calicut	State	Participation



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70	Gokul G Nair	Karnak 2022 (Keyboard Ninja)	MBITS	State	Participation
71	Hagen Joby	Karnak 2022 (Keyboard Ninja)	MBITS	State	Participation
72	Jose Poul Biju	Karnak 2022 (Keyboard Ninja)	MBITS	State	Participation
73	Merin Jose	Karnak 2022 (Keyboard Ninja)	MBITS	State	Participation
74	Paul K Mathew	Karnak 2022 (Keyboard Ninja)	MBITS	State	Participation
75	Solamon Aji	Karnak 2022 (Quizwiz)	MBITS	State	Participation
76	Sam Riju	Karnak 2022 (Keyboard Ninja)	MBITS	State	Participation
77	Sam Riju	Karnak 2022 (Quizwiz)	MBITS	State	Participation



Google ACE from ASAP

Additional Skill Acquisition Programme is offering Google's Associate Cloud Engineering Certificate course. They provided free online programme offered by Google for Engineering Students. The programme has online self-learning instructional content and assessments. The learners will get free access to Google Cloud resources. They are able to use Google Cloud Console and the command-line interface to perform common platform-based tasks to maintain one or more deployed solutions that leverage Google-managed or self-managed services on Google Cloud. The training programme was for 16 weeks and it was free of cost. The training is free of cost. Almost three batches completed the Google Ace and around 117 students completed the course within 16 weeks. 5 of our students got special appreciation from Google for completing the course within 3 weeks. Further, 23 students qualified ASAP eligibility test in 2022 with 100% free scholarship and many others with less percentage scholarship.



Patent & Book Published

Three patents were published from MBITS in the year 2021. Two of them were published by Dr. P. Sojan Lal, Principal, MBITS and one by Asst. Prof. Arun Eldho Alias, AP, Dept. of Electrical and Electronics Engineering, MBITS. Dr. Sojan Lal Poulouse, Principal, MBITS published the book titled "Privacy Preservation in Onto-Web: steps to protect data confidentiality using ontology rules" jointly with Rev. Fr. Dr. Rubin Thottupurathu Jose. The book was in Portuguese, Italian, French, Spanish & German Editions in addition to English. In addition to that two more book were published in his name in the year 2021.



Education 4.0 Implementation Committee

For encouraging accelerated remote learning, we constituted an Education 4.0 implementation committee (E4IC). The E4IC was formed in March 2020, before lockdown in India, with representations from all departments chaired by the Principal. The committee consists of the Principal as head, one nodal coordinator, one coordinator from each department along with one member and Technical members for implementing campus Learning Management System (LMS). Of course, the biggest change we are likely to see as part of Education 4.0 is a deeper fusion of technology into the teaching process. Initially, the committee proposed online classes through platforms like ZOOM, Google Classroom, CISCO WebEx etc. Later, this committee has done a performance evaluation of various platforms. The team periodically analyzed and reviewed the progress of online/ offline teaching. Corrective measures and regular weekly meetings of the Academic Committee further strengthened the new process. The survey data for all courses was from engineering students to evaluate the effectiveness of various parameters of the Digital teaching and learning. E4IC makes learning more accessible using dynamic teaching materials to keep students interested. Students being able to log in any time and from anywhere to learn at their own pace. E4IC is truly revolutionary in terms of improving student learning outcomes.

CHIEF MINISTER'S STUDENT EXCELLENCE AWARD'22

Rs. 1 LAKH & MERIT CERTIFICATE



ALBIN THOMAS



ANNA JOY



ANNU ROSE TOMY



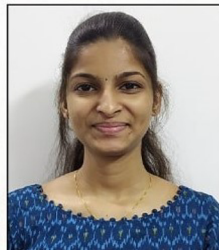
ANU POLLY



ATHULYA VIJAYAN



BESSE BOSE



ELEN SARA KURIAN



JEES MARIYA TONY



K H NIRMALDAS



LUDIYA JAMES

Journey of excellence continues.....

It's another prestigious moment in the history of MBITS. We are proud to announce that 10 of our graduates are selected for Chief Minister's student Excellence award (Rs. 1 Lakh each).



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COMPUTER SCIENCE AND ENGINEERING

Rebuild Kerala

MBITS was selected to collaborate for renovation of LSGD Roads which were damaged during the mega flood in 2018. Field study, Survey and data collection were conducted to improve the quality of the flood affected roads in Idukki & Ernakulam District. The coordinator for the project was Mr. Jenty Joy, Placement and training officer and the joint coordinators were Mr. Midhun Mathew, HOD (CSE) and Asst. Prof. John Samuel (FIE), Civil Engineering Department.



Hearty Congratulation: “CGPA 9 & Above”

2020-2024 Batch

VYDEHY SOBHAN, S1CSE

BEEMA ASHRAF, S1CSE

2020-2024 Batch

MISHAL FATHIMA, S1CSE

PREMCHAND C P, S1CSE

Learning Management System (LMS)

Covid'19 pandemic leads to a sudden shift from classroom teaching to online teaching. To go-on with education, MBITS had procured Google Suit and implemented an LMS for encouraging online teaching, through a single platform for easier administration and proper e-auditing. The LMS team implemented classroom through Google Classroom for each and every class. The academic activities are currently carried out through LMS.

Infosys Certification Course In 5G

Infosys Springboard launches Certificate Courses in 5G with 13 weeks, Experts led sessions with Industry case studies.

Infosys is organizing the course in collaboration with Prof. Dr. Dhadesugoor R. Vaman and Mar Baselios Institute



of Technology and Science. Fifth generation technology standard for broadband cellular networks is transforming and creating new opportunities for people, businesses and society



Familiarization of 8086 with its interface

Ms. Elby K. Eldhose, an assistant professor in the CSE department at MBITS, Kerala, led a session titled "Familiarization of 8086 with its interface" on November 25, 2021. Thirty-one candidates attended the workshop and learned about the 8086 microprocessor's architecture and interface. Ms. Eldhose covered a wide range of subjects, including registers, memory organization, and instruction set, in her in-depth explanations of the functions and parts of the 8086 CPU. The training gave the attendees the fundamental information needed to comprehend and operate with microprocessor-based systems.



Introduction to LaTeX

Ms. Nisreen M. Ali, an assistant professor in the CSE department at MBITS, Kerala, led a workshop titled "Introduction to LaTeX" on December 13, 2021. Eighty people attended the class, where they learned about LaTeX, a potent typesetting program frequently used for technical and scientific documents. Ms. Ali walked the candidates through the fundamentals of LaTeX, going over things like formatting, mathematical equations, document structure, and graphics integration. Through practical LaTeX software experience, the course participants were able to produce papers of professional quality quickly and effectively.





Mar Baselios Institute of Technology and Science

Nellimattam, Ernakulam District, Kothamangalam, Kerala 686693

COMPUTER SCIENCE AND ENGINEERING

Introduction to LaTeX

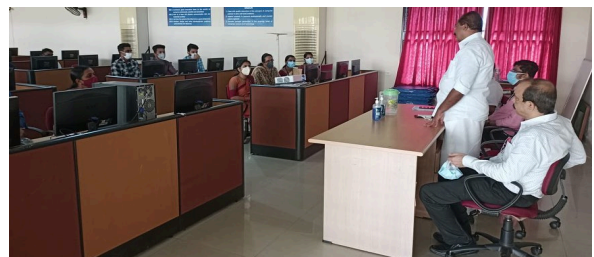
A networking workshop was held on May 12, 2022, by Ms. Reshma S., a Ph.D. scholar from the CSE Department at MBITS, Kerala. 37 people attended the program, which covered practical aspects of networking. Ms. Reshma gave students practical experience in network configuration, management, and troubleshooting by simulating networking scenarios using CISCO Packet Tracer software. Basic networking principles like network design, protocols, addressing, and security were taught in the session. The information and abilities that participants acquired were crucial for planning and managing computer networks with industry-standard technologies such as Cisco Packet Tracer.

'Open for All!': Webinar Series

The team MBITS had organized 46 'open-for-all' national/international webinars in the 2020-21 Covid'19 pandemic period. The webinar was attended by 18,800 participants from 2,000 unique institutions in India and abroad. The webinars were telecasted on Facebook live and other platforms like Zoom, WebEx and YouTube live.

INTERNSHIP PROGRAM

Inauguration of internship Program on Computer Hardware, Maintenance and Networking was done by Secretary, Shri.



C.A. Kunjachan. Principal and HOD of CSE Dept. delivered the felicitati



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