CAREER COUNSELLING ON PEGA UNIVERSITY ALLIANCE PROGRAM

A career counselling session on the "PEGA University Alliance Program" was conducted on 8th April 2022 in the Seminar hall for all the final year students. The session commenced with a welcome address by Mr. Arul Edwin Raj, AP/ECE followed by the presidential address by Dr. Jerald Jeba Kumar, Principal. Ms. Aishwarya, the trainer emphasized the career opportunities available to students in the PEGA technology domain encouraging them to pursue further learning and certification. She provided insights into the various applications of PEGA technology across industries such as healthcare, finance, insurance and telecommunications. The seminar shed light on the career opportunities in the field of PEGA technology and highlighted the growing demand for PEGA professionals in the job market, along with the required skills for success. The session ended with a formal vote of thanks delivered by Ms. Sophia Jone (AP/ECE) expressing gratitude to the speaker and participants for their active participation and contribution to the success of the event.





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COLLEGE VISION

To become a premier institution and centre of professional education with moral ethics in engineering and technology to produce socio-friendly technocrats.

COLLEGE MISSION

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- * To provide quality skill-based professional education for all deserving candidates belonging to all sectors of society.
- * To adopt innovative strategies, add-on courses, and establish the state-of-the-art infrastructure for effective teaching learning processes and research activities.
- * To attract and nurture the excellent and committed faculty members and the technical workforce.
- * To organize healthy interactions with the stakeholders for the students' overall personality development.
- * To inculcate the social responsibilities among the prospective engineers.

Bethlahem Institute of Engineering

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BETH CHRONICLES

VOLUME 6, ISSUE 2
JANUARY 2022 TO JUNE 2022

THE OFFICIAL NEWSLETTER OF BETHLAHEM INSTITUTE OF ENGINEERING

The ECE department recently organized an industrial visit for its third-year students to the Indian Institute of Astrophysics, Kodaikanal, Munnar and Cochin. The visit which took place from April 5th - 8th provided students with valuable insights into the internal operations of companies and a practical perspective beyond academic boundaries. The visit to the Indian Institute of Astrophysics was particularly exciting and expanded students' knowledge of space research. Overall, it was an enriching learning experience that helped students to broaden their horizons and connect with the world around them.

The ECE department recently organized an INDUSTRIAL VISIT



GUEST LECTURE ON SOFTWARE ARCHITECTURE



Software Architecture plays a fundamental role in the design, development and maintenance of software systems. A guest lecture on Software Architecture was held at on 21st March, 2022 10.00 a.m. Ms. R. P. Shyni Vinse, AP/IT welcomed all the participants and guests. Ms. R. Jegana, HoD/IT introduced the chief guest and Dr S.Jerald Jeba Kumar, Principal delivered the inaugural remarks and gave suggestions for the students to make use of software Architecture. Then the resource person Mr. S. Prakash, Lead Architect, Ignitho Technologies, Kochi

explained the various strategies for designing software architectures that meet non-functional requirements such as performance, reliability, availability and security. The students learnt to design scalable, reliable and maintainable software architectures for a wide range of applications and domains. In the end, Vote of thanks was proposed by Ms. Anushlin Leena AP/IT.

EMERGING TECHNOLOGIES IN IT

A Guest Lecture on "Emerging Technologies in IT" was held on 18-03-2022 at 10:00 a.m. Ms. Febin Rani L from the CSE department delivered the welcome address and introduced the program. The lecture was presented by Dr. Nidheesh R, Technology Lead at Infosys. He discussed AI and ML technologies and their applications across various sectors inspiring participants to explore the potential of these emerging technologies to drive digital transformation and innovation in their respective fields. The program concluded with a formal vote of gratitude from Asha Jincy, IV CSE.



Value abbed Courses on INTERNET OF Things (10T) Using Raspberry Di

A value-added course titled "IoT using Raspberry Pi" was conducted for second and third-year ECE students every Saturday from March 26, 2022 to May 21, 2022. The course started on March 26, 2022, at 9:00 a.m. with a prayer song by the department choir, followed by a welcome address by Ms. J. Sophia Jone, AP/ECE. The resource person provided comprehensive insights into IoT fundamentals, architecture, protocols, various platforms, real-world IoT examples, an introduction to Raspberry Pi, its pin descriptions, IoT applications using Raspberry Pi, LAMP web server setup, GPIO control via web browsers, home automation with Raspberry Pi and using Node-RED and the MOTT protocol with the Node-RED visual editor.



Practical sessions were organized to enhance the students' understanding. The course concluded on May 21, 2022, with an assessment and feedback collection from the participants. Certificates were awarded based on the assessment results

Add-on Program on Advanced Excel Workshop on Java

inaugurated on May 26th, 2022 and the session was highly interactive with the participation of 22 Information Technology students. Ms. Shyni Vinse provided an overview of Advanced Excel's extensive use in software development. The program covered both fundamental and advanced concepts of Microsoft Excel focusing on hands-on programming experience. Topics covered included formatting, proofing tools, data protection, advanced paste special techniques and new features in Excel 2013, 2016 and 365. As a result, students significantly enhanced their proficiency in Excel, gaining valuable skills applicable to their future careers.





A workshop on "Java" was held on 25-03-2022. Ms. Marly.G (AP/CSE) delivered the welcome address. Ms. Vinisha W.V (AP/CSE) introduced the Chief Guest. The lecture was given by Mr. Stalin Samuel, Gelbero Solutions Pvt Ltd, Karungal. The speaker covered the fundamental concepts of Java programming including variables, data types, operators, control flow statements and object-oriented programming (OOP) principles. Students gained a broad introduction to the Java programming language and its core concepts. The program came to an end with the formal vote of thanks by L. Febin Rani, (AP/CSE).

Guest Lecture on Cyber Threats and Security in a Post Pandemic World

A guest lecture titled "Cyber Threats and Security in a Post-Pandemic World" was held on April 13th, 2022, at 10:30 a.m., in the seminar hall. Mrs. G. Marly, the Head of the CSE department delivered the welcome address and the Principal, Dr. S. Jerald Jeba Kumar gave the presidential address. The lecture conducted by Dr. E. A. Mary Anitha, a Professor of CSE at Christ University in Bengaluru focused on the evolving threat landscape for cyber security in the wake of the COVID-19 Pandemic. Dr. Anitha emphasized the importance of cyber security in the digital era and provided participants with knowledge and tools to protect against evolving cyber threats. Anupriya R, an III CSE student concluded the program with a formal vote of thanks.



ANNUAL SPORTS MEET

Bethlahem Institute of Engineering hosted its 14th Annual Sports Meet on May 12th, 2022 the VIGOR 2K22, a day filled with fervour and excitement. The chief guest was Ramesh Kannan, Sub-Inspector of Police, Karungal.



The day started off with the lovely rendition by the choir praising the Lord Almighty. This was followed by the Inter-House March Past, a highly competitive event where the four houses eyed for the first place.



Another highlight of the day was the lighting of the unforgettable memories. Dr. Selvaraj, the Principal Presidency Torch which was carried by Anirudh of expressed his appreciation to all the teachers for Civil department, II year who won the Zonal Level their cooperation and support. He also advised the Championship in Badminton.













At the end of the day, the students left with big smiles on their faces as the Green House was declared as the House Champions. It was a day filled with enthusiasm, sportsmanship

children to maintain their sportsman spirit.



TABLE TENNIS

The table tennis competition held on April 19, 2022, was an exciting event that highlighted the skill and agility of the participants. Players competed fiercely, impressing the audience with their techniques and strategies. The competition fostered sportsmanship with participants supporting each other. Feedback was overwhelmingly positive, praising the talent displayed. Overall, the event successfully promoted healthy competition and enthusiasm for the sport among students.

CHESS TOURNAMENT SKIT COMPETITION



The chess tournament held on March 26, 2022, was an exciting event that highlighted participants' strategic skills and competitive spirit. Players engaged in intense matches, demonstrating critical thinking and concentration. The tournament fostered camaraderie, with many exchanging tips and strategies.

MIMICRY COMPETITION

The Mimicry Competition held on February 26, 2022, was a great success, featuring participants who showcased their talent for impersonation and humour. Contestants entertained the audience by mimicking various personalities, eliciting laughter and applause. The event highlighted creativity and fostered a lively atmosphere, with overwhelmingly positive feedback from attendees. Overall, it provided a fantastic platform for students to express their artistic abilities and brought the community together in a spirit of fun and enjoyment.



The skit competition held on March 19, 2022, was a lively event that highlighted students' creative talents through entertaining and thought-provoking performances. competition fostered teamwork and collaboration, resulting in highly praised originality and effort from participants.





ENGLISH ELOCUTION



The English Elocution Competition, held on January 25, 2022, resulted in a vibrant showcase of student talents and public speaking skills. Participants demonstrated confidence and creativity, contributing to a spirited and engaging event. The competition not only highlighted individual achievements but also fostered a sense of community and camaraderie among students.

Seminar on Virtual Private Network

A seminar on "Virtual Private Network" was organized by CSE department on 06-04-2022 at Bethlahem Institute of Engineering, Karungal. Ms. Febin Rani L (AP/CSE department) welcomed the guest and introduced the program to all. The presidential address was given by the Principal Dr. S. Jerald Jeba Kumar. The speaker Mr. Aju S, MERN Stack Developer, RED Advertisers, Trivandrum discussed the advantages of using VPNs for privacy protection, data security, bypassing censorship and accessing geographically restricted content. The



participants gained the knowledge and skills to safeguard their online activities and enhance their privacy and security on the internet through VPN. The program came to an end with a formal vote of thanks by Ahisha Blessy of Final year CSE.

International conference on Soft Computing and Intelligent Systems





The International Conference on "Soft Computing and Intelligent Systems," organized by the Department of Electronics and Communication Engineering, took place on May 6, 2022, in the seminar hall. The conference commenced with a welcome address by Dr. L. Femila, Convenor & HoD/ECE. In his presidential address, Er. T. Isan, Director, emphasized recent trends in communication and encouraged the audience to expand their knowledge. The chief guest, Mr. Seetharam N, Senior Software Developer at TCS, Chennai, released the soft copy of the conference proceedings, which was received by Principal Dr. S. Jerald Jeba Kumar and distributed it among dignitaries and attendees. He inspired students and participants to focus on real-time applications and urged them to develop their skills through participation in various international conferences. Dr. X. Felix Joseph, HoD/CSE, delivered the vote of thanks. After a short tea break, the paper presentation session commenced, concluding with the distribution of certificates to all participants.

ENVIRONMENTAL CONSERVATION

The Environmental Conservation Program, organized by the NSS unit, featured a variety of activities, including tree planting drives and waste management and recycling initiatives. The active participation of both students and faculty contributed to the program's success. The institute emphasized the importance of preserving natural habitats and resources, both on campus and in the local community. Through these conservation efforts, the goal was to instil a strong sense of environmental responsibility among students.



SKILL DEVELOPMENT WORKSHOP FOR YOUTH

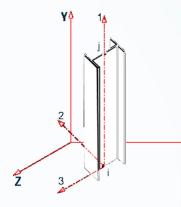
The "Skill Development Workshop for Youth" was held on March 16, 2022 organized by the NSS unit. The Resource Person focused on important areas such as enhanced communication skills, teamwork and problem-solving abilities unlocking the students' full potential through interactive sessions and activities. Furthermore, he addressed the importance of effective communication in leadership roles. The workshop concluded with practicing case studies and group activities aimed at enhancing decision-making skills.



VALUE ADDED COURSE ON STAAD PRO







The Value Added Course was inaugurated on July 14, 2018, at 9:00 a.m. with a prayer song by the college choir, followed by the welcome address delivered by Mrs. V. Monisha, AP/Civil. The session focused on STAAD PRO and it was attended by second and third year Civil Engineering students. They gained theoretical and practical knowledge about STAAD PRO. The event concluded with an assessment and collection of feedback from students on May 21, 2022.

VALUE ADDED COURSE ON ADVANCED EXCEL



A value-added course on "Advanced Excel" was offered to II and III-year IT students from March 26, 2022, to May 21, 2022, every Saturday. The course opened with a

prayer song led by the department choir on March 26, 2022, at 9:00 a.m., followed by a warm welcome speech from Ms. R. Jegana, AP/IT, which set a joyful tone for the event.

The resource person, Ms. R. P. Shyni Vinse, AP/IT, covered various advanced Excel topics, including automation of repetitive tasks, development of custom functions, and workflow streamlining. Participants gained valuable insights into advanced Excel formulas and techniques, empowering them for both professional and academic success. Feedback forms were collected to gather ideas for future improvements, and based on the assessment, certificates were awarded to participants in recognition of their successful completion of the course.



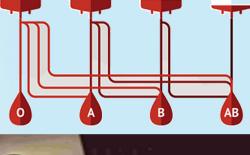
Clay Modelling Competition

The clay modelling competition held on February 5, 2022, highlighted the impressive talents of participants and significantly contributed to the event's success. Students showcased their creativity through a diverse range of imaginative sculptures. The competition fostered community and collaboration, encouraging artistic expression. Feedback emphasized the enjoyment and inspiration from the event, making it a memorable experience that strengthened bonds within the student community.

BLOOD DONATION CAMP





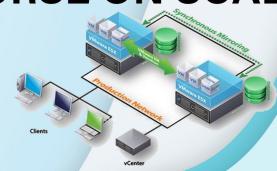


The Blood Donation Camp organized by the NSS unit on June 20, 2022, was a resounding success, with students donating over 80 units of blood. This initiative highlights the institution's commitment to addressing the critical issue of blood shortages, providing hope to those in need. Student volunteers actively raised awareness about the importance of regular blood donation and its lifesaving potential, emphasizing its crucial role in assisting patients and accident victims. Blood donation is a vital service that positively impacts countless lives in the community.



VALUE ADDED COURSE ON SCADA

Value added course SCADA was conducted for the Third and Final year EEE students from 26-03-2022 to 21-05-2022 (every Saturday). The course was inaugurated on 26-3-2022 at 09.00 a.m with a prayer song by the department choir followed by the welcome address delivered by Mr.Sugad Singh AP/EEE. The resource person Mr. Siva Bala Vigneesh G covered basic topics of SCADA. SCADA is the most powerful software in the area of Electrical Power systems. This course helped the students to gather knowledge on network security architecture, risk assessment and the implementation of security controls. Finally, the event was concluded by conducting assessment and collecting feedback form from students on 21-05-2022. Based on the assessment, certificates were given to the participants.





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VALUE ADDED COURSES ON DATA SCIENCE FUNDAMENTALS

A value-added course on 'Data Science Fundamentals' was conducted for second and third-year CSE students from March 26, 2022, to May 21, 2022, every Saturday. The course was inaugurated on March 26, 2022, at 9:00 a.m. with a prayer song performed by the department choir, followed by a welcome address from Mr. J. John Bennet, AP/CSE. The resource person, Ms. L. Febin Rani, AP/CSE, covered foundational topics in Data Science, focusing on the libraries available in Python for data science applications. The course provided students with valuable insights and knowledge in this emerging field. The event concluded on May 21, 2022, with an assessment and the collection of feedback forms from the students. Based on the assessment results, certificates were awarded to the participants, recognizing their successful completion of the course.



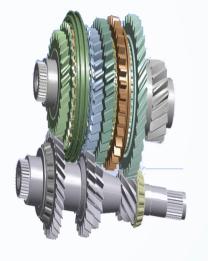


VALUE ADDED COURSES ON ANSYS

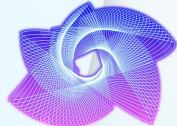
The course commenced on 26-03-2022 at 09:00 a.m. with a prayer song performed by the college choir. Mr. D. GINU, AP/MECH delivered the welcome address. The session focused on the ANSYS analysis software. Both II and III year Automobile Engineering students actively participated in the course gaining theoretical and practical knowledge of the ANSYS software. The event concluded with an assessment and the collection of feedback forms from students on 21.05.2022.







VALUE ADDED COURSES ON ADVANCED HYPER MESH



The course was inaugurated on March 26, 2022 at 9:00 a.m. with a prayer song by the college choir. The welcome address was delivered by Mr. D. Ginu, Assistant Professor of Mechanical Engineering. The session focused on the Advanced Hypermesh analyzing software. Second and third year Mechanical students participated in the course and gained theoretical and practical knowledge about Ansys software. The event concluded with an assessment and collection of feedback from students on May 21, 2022.





Bethlahem Institute of Engineering celebrated its 14th college day on 13, May 2022 at 10.00 a.m. in college lawn. Mr.C.Jebashiamony, Deputy Director, Engine Assembly & Integration Entity, ISRO was the Chief Guest and Anto Assisi Roque, Senior HR Business partner, Capestart was the Guest of Honour. They both were warmly welcomed by Director Er.T.Isan, Principal Dr.Jerald Jeba Kumar our student Representative.

The programme commenced with a hymn to Lord Almighty by our Bethlahem choir. Principal Dr. Jerald Jeba Kumar presented the annual report accentuating the progress of the college in his address congratulated all the proud scholars for excelling in academics and co-curricular activities and encouraged the students by his enlightening words.

Our Principal Dr. Jerald Jeba Kumar welcomed the chief guest and presented inaugural address and highlighted that college is committed to inculcate three virtues of human life in the students through 3P's: Persistence, Preservance and Propriety and 3C's: Creativity, Confidence and Courage. This motto is deeply embedded in the heart of our students as they move ahead to win more accolades.

A very inspirational speech was delivered by Mr.C.Jebashiamony, He emphasised students on moral education. Ms.Dr.C.Emmy Perma Coordinator of IQAC presented the IQAC report. A virtual tour of college, showing all the activities organised in the college throughout the year was presented.

A prize distribution ceremony was conducted to felicitate and recognize the talent of students in various fields like Academics, Art, Cultural and Sports etc. Ms.Femila announced the award of Excellence and presented the presentation of prize winners.

Finally the vote of thanks was delivered by convener of college Day Mr.Living Prephet. He acknowledged the efforts of students, teachers and supporting staff and thanked the esteemed guests for their precious time and presence. This was followed by the National Anthem as a tribute to our nation.

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Journal Published



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Programming in C

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Journal Published



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JOURNAL NAME

Engineering Failure Analysis

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