

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

TECH-ILLUMINATO

Engineer your Life

Academic Year 2019-20 Odd

DEPARTMENT VISION

“To Impart quality education and nurture students to become successful technocrats by achieving excellence in information science and engineering field for addressing the evolving needs of the industry as well as the society”.

HIGHLIGHTS

- Technical Talks
- Forum Activity
- Alva's App-athon
- Workshops
- Staff Achievements
- Pre-placement training
- Placement News

DEPARTMENT MISSION

- ✚ To provide quality technical education for preparing competent professionals in the Information technology field.
- ✚ To provide the suitable infrastructure and environment that inculcates best engineering practices for the Socio-economic development of the society.
- ✚ To foster the students to become successful technocrats to meet the global competency in the field of IT industry.
- ✚ To develop entrepreneurship skills through active research and innovation by inculcating ethical values among students.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- ✚ PEO1: Apply the principles of fundamental mathematics and Information Science & engineering to provide solutions to the real time problems.
- ✚ PEO2: Pursue higher education and engage in research to meet the challenges of the latest technologies.
- ✚ PEO3: Design and develop reliable software systems to satisfy the industrial needs through multidisciplinary projects.
- ✚ PEO4: Able to work in various IT related fields and contribute to the society.

TECHNICAL TALKS

Topic: “Artificial Intelligence and Machine Learning”

Date & venue: 14th September 2019, ISE Lab

Resource person: Dr. Chetana Prakash
Professor, Department of CSE
BIET, Davanagere.

Dr. Chetana Prakash explained about Artificial Intelligence and it is a way of making a computer, a computer-controlled robot, or a software think intelligently, in the similar manner the intelligent humans think. Strong artificial intelligence or, True AI, may refer to Artificial general intelligence, a hypothetical machine that exhibits behavior at least as skillful and flexible as humans do.

Also she briefed about Machine learning and it is a core sub-area of artificial intelligence; it enables computers to get into a mode of self-learning without being explicitly programmed. So, put simply, the iterative aspect of machine learning is the ability to adapt to new data independently. Machine Learning. Machine learning is a branch in computer science that studies the design of algorithms that can learn. Typical tasks are concept learning, function learning or predictive modeling, clustering and finding predictive patterns.





Topic: "Corporate Ethics"

DATE & VENUE: 24th August 2019, MBA Seminar Hall

Resource Person: Mr. Nanda KishorNayak
Manager (Admin & Facilities)
Marlabs, Mysore

Mr. Nanda KishorNayak spoke about "Ethical culture is the foundation of all our efforts. It's a specific culture: You either like it or you hate it, but found people who are passionate about the mission, love the culture of integrity, and can do big things here. The company as a whole has to have a very deliberate, continuous effort for a common culture.

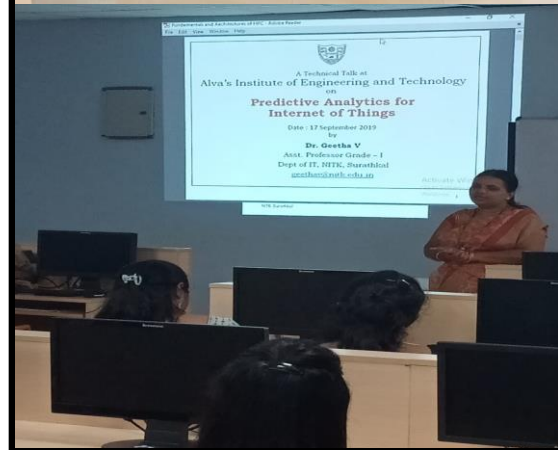
He briefly explained about once an ethical direction and strategy are set, human resources, compliance, and sustainability will find it easier to collaborate effectively. There are many paths to success here. Some companies have added behavioral specialists to compliance teams. Others are ensuring that sustainability considerations are fully incorporated into product design and go-to-market strategies. Others still are considering ethics holistically, via governance structures that combine risk, internal audit, compliance, sustainability, and government affairs.

TOPIC: "Predictive Analytics for IOT"

DATE & VENUE: 17th September 2019 at Engineering Seminar Hall

Resource Person: Dr. Geetha V Professor, Department of Information Technology
NITK, Surathkal

Dr. Geetha V briefly explained about the how the predictive analysis has to be utilized in the project. Also she spoke about Design Thinking is a design methodology that provides a solution-based approach to solving problems. It's extremely useful in tackling complex problems that are ill-defined or unknown, by understanding the human needs involved, by re-framing the problem in human-centric ways, by creating many ideas in brainstorming sessions, and by adopting a hands-on approach in prototyping and testing. Understanding these five stages of Design Thinking will empower anyone to apply the Design Thinking methods in order to solve complex problems that occur around us.



DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

FORUM ACTIVITY

TechCrunch - 2K19

The forum of Information Science & Engineering Department, “**TechGeekz**” has organized an intercollegiate technical event “**TechCrunch 2K19**” on 6th of September 2019 in association with **AIET-ISTE Student Chapter (KA-136)**. The event was inaugurated by Dr. Peter Fernandes, Principal, AIET-Moodbidri, Dr. Praveen J, Dean Academics, AIET-Moodbidri, Mr. Jayantkumar A Rathod, Head of ISE department, Mr. Sudarshana K, ISE Tech-Club Coordinator, Mr. Rakesh MR, President of TechGeekz by lighting the lamp.

In his presidential speech, Dr. Peter Fernandes told that “The vision of organizing any event is to demonstrate the ability of the individual to be the whole and sole of the team. Such events explore the undiscovered skills and attitude of the organizing members to be the responsible citizen. The TechCrunch-2K19 is one such event whose vision is to nurture and convey the motto of “Responsible Technician of the Nation”. It also evaluate the Problem analysis, Critical Thinking, Programming, Innovative design, Impressive presentation skills of the participant along with the skill of leading the team in any new-fangled environment”.

Mr. Vivek Alva, Managing Trustee, AEF Moodbidri expressed his views on “The importance of fundamental engineering knowledge, application skills and attitude for an engineering graduate to face the future professional challenges” in his guest speech.



ALVA'S APP-ATHON

The student's forum of Information and Science and Engineering Department, "TechGeekz" has organized an intercollegiate technical event "Alvas App-athon 2K19" on 14th of October 2019 in association with AIET-ISTE Student Chapter (KA-136).

The event was inaugurated by Dr. Dattathreya G, Dean (Planning), AIET-Moodbidri, Dr. Praveen J, Dean (Acad.) AIET-Moodbidri, Mr. Jayantkumar A Rathod, Head of ISE department, Mr. Sudarshana K, ISE Tech-Club Coordinator, Mr. Vishak Amin, Student Coordinator, ISE-Tech Club.

Ms. Gangothri NV hosted the event and Mr. Vishak Amin, presented the brief information about the scheduled activities in the event.



28 Teams from various higher educational institutions of South Canara region have taken part and witnessed the Alvas-Appathon-2K19.

The second prize in Alvas-Appathon-2K19 was bagged by Ms. Ramyashree Shetty and Ms. Spoorthi, of AIET-Moodbidri.

Alvas-Appathon-2K19 First prize was bagged by Mr. Charan and Ms. Raksha of SDMIT Ujire.

The prizes were distributed by Dr. Roopalakshmi R, Professor, Department of ISE, and Prof. Jayantkumar A Rathod, HoD, Department of ISE to the winners and participants of Alvas-Appathon-2K19.

WORKSHOPS

Workshop on Coding Skill

The Coders of Alva's organized workshop on "Coding Skills" on 21st September 2019 which was delivered by Mr. Badrinath, Programmer at Amazon Kindle E-Books. The workshop was inaugurated by Placement head Mr. Sushanth Anil Lobo, coordinator, Mr. Manjunath H.R and other faculties. .

He started with the interaction about how to solve problems by making the solution part by part and simpler in the terms of writing the code. He made it simpler for us by teaching us the way to approach a problem, that is, by finding the solution for a problem part by part and then combining them together.

The mouse and cheese problem

- Find out the number of possible ways for mouse to reach cheese in the maze. Writing the code by understanding the mathematics induction concept makes this solution easier.

Writing the code for side view and top view of tree structure

- Basic knowledge about the tree traversals and the levels of the tree is important.

At last he summarized the things he mentioned in the complete session and motivated the students to improve their coding and logical programming skills.



WORKSHOP ON HTML, PHP AND DATABASE

The department organized workshop on “HTML,PHP and DATABASE” on 18th October 2019 which was delivered by Mr. Rakesh M R and Darshan P B, 7th sem ISE students. The workshop was inaugurated by Mr. Jayanthkumar A Rathod HoD, coordinator Mr. Manjunath H.R and other faculties.

Objective: Make the students understand the basic concepts of web development for DBMS like HTML ,PhP and My sql.

Workshop started with the introduction of HTML then covered basic tags like button, input, link, tables and forms. Then explaining the user interface in MySQL phpmyadmin database using xampp server. The queries like insertion, updating, deleting were shown using graphical interface provided in admin panel and same were did using the SQL queries in command line interface. The PHP language introduction was given and the basics like variables,conditional statements and loops were explained. Students were made to use php to connect database using predefined functions and in different methods of accessing the database.



WORKSHOP ON HARDWARE AND NETWORKING CONCEPTS

The department organized a hands-on session workshop on “Hardware and Networking Concepts” on 09 /NOV/2019 for 3rd and 5th semester students. Workshop mainly focused on basics of hardware and networking concepts of computer systems. The students were exposed

to live demo of different hardware components of computer systems along with their functionality. They also got an idea about different network topology.



DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

STAFF ACHEIVEMENT

- ✚ **Funding Project Received to the Department:** Department received funding project from VGST, Government of Karnataka, worth of Rs. 5 Lakhs under the guidance of Dr. Roopalakshmi R, for the title "*Detection of Artificially Ripened Fruits using Spectrometric Techniques*".
- ✚ Six project papers published in Springer AIS Book chapter series in the month of Jan 2020.

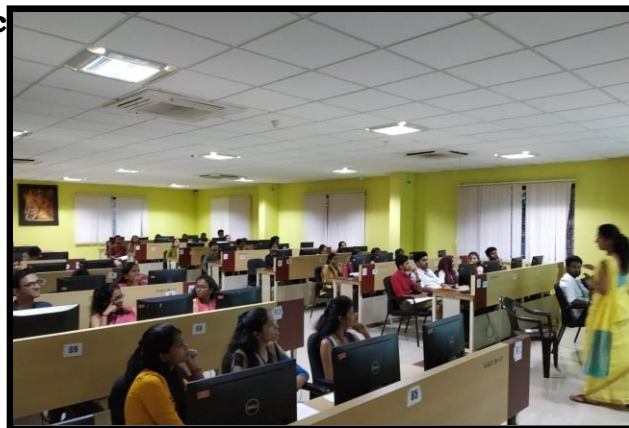
PRE- PLACEMENT TRAINING

Pre-placement training was organized for final year students which focused on current industry concepts as well as training for placement. Pre placement training focused on over all development of candidate in order to prepare for various placement drives.

In-house Placement training

Database Applications & Networking

On 18th July, 2019 Ms. Shruthi Shetty and Ms. Ankitha Shetty Department of CSE were handed the Database Applications and Networking concepts. Later they also done the assessment of all the students based on basics of Database and Networking Concepts.



Big-Data Analytics Hands-on Workshop

On 19th July, 2019 Dr. Sumith N, Department of CSE handed a hands on workshop on Big Data Analytics. She has addressed about the various concepts of BDA with hands-on session from 9-5 PM.

Data Structures with C & Advanced Java Programming

Q-Spider Training Software Institute, Bangalore in association with Department of CSE has conducted a 18 days hand-on training on Data Structures with C and Advanced Java Programming during weekends of April/May and continuously from 10th July-17th July, 2019. Mr. Manish Raj, Mr. Rohan Prabhu, Mr. Shariq and Mr. Mohammed Idris trainers were taught Data Structures with C as well as Advanced Java Programming using hands-on session. About 136 final year students were trained by above resource persons.

Algorithms and Image Processing Applications

Dr. Mohammed Javed, Assistant Professor, IIIT, Allahabad was a resource person for the first session on 18th July, 2019. He addressed about the various Engineer traits and Algorithms with live examples. He also addressed about the research perspective of Image Processing Applications.

Initially Dr. Javed explained about the 10 characteristics of engineers that includes Team Player, Continuous Learning, Creativity, Problem Solving, Analytical Ability, Communication Skills, Logical Thinking, Mathematical Ability, Attention to Detail and Leadership.



Hands-on Workshop on Networking

Dr. Jaidhar C D, Dept of CSE, NITK, Surathkal was the resource person for the 18th July, 2019. Dr. Jaidhar C D has taken session on Networking with Network Packet Tracer Software. Initially he addressed with live examples in simulations. In the afternoon session he explained and demonstrated the various networking components like switch, hub, router etc.



On 20th July, 2019 Prof. Padma Reddy, Professor, Sai Vidya Institute of Technology, Bangalore was the resource person for the topic Programming with C & Data Structures. He has addressed the students about C Programming concepts starting from Preprocessor directives to Data Structure concepts with live examples

Data Structures & Algorithms

Dr. Prasanna Kumar H R, Professor & Head-ISE, PES Institute of Technology & Management, Shimoga has delivered a session on Data Structures and Algorithms. Dr. Prasanna Kumar has started the concepts of Data Structures that includes structure, arrays, stack, queue , linked lists, trees and graphs with live examples. He also discussed about Design & Analysis Algorithms with Time Complexity Issues.

Dr. Prasanna Kumar also discussed the Need of Analysis , types and Applications of Algorithms with the live examples. On 21st July Afternoon session he discussed about the various placement related question and answers for the students.



Training on IoT and its Applications

2 days training on IoT and its Applications was conducted on 26th& 27th July,2019 for final year CSE/ISE/ECE students. Dr. Mohit P. Tahiliani, NITK Surathkal addressed the topic on “Need for Speed:Minimize the impact of Bufferbloat on IoT Applications” Mr. Vishal Rathod, Reseach Scholar NITK Surathkal took the hands-on training on IoT Applications to the students.



Workshop on Git-Hub Coding Skills

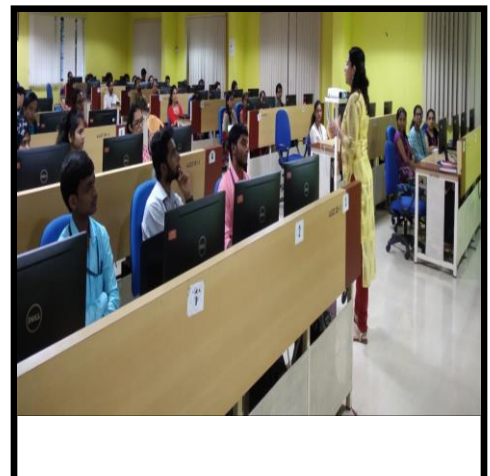
2 days workshop on Git-Hub coding skills was arranged for final year CSE/ISE/ECE students on 26th& 27th July,2019. Mr. Sagar from Dlithe Software, Bangalore was the resource person for 2 days. He explained and demonstrated the students about to creating GitHub accounts as well as uploading the contents to GitHub.



Workshop on AWS

4 days Workshop on AWS(Amazon Web Services) was conducted for CSE final year students from 5th to 8th August,2019. Mrs. Seema Nair from Callibre Code Solutions, Bangalore was the resource person.

AWS introduction, EC2 instance creation, Elastic IP mapping to server topic was completed on day 1 of the training.Remote connection to AWS server, EC2 snapshot and recovery was completed on day 2 of the workshop. Cloud watch monitoring, s3buckets creation & settings, AWS Cli commands are completed on 3rd day of the workshop. On final day, s3 bucket backup to server, MongoDB No SQL DB creation and basic queries were discussed.





Workshop on Ad. Java& J2EE, JQuery

Workshop on Ad.Java& J2EE, JQuery was conducted on 5th to 8th August, 2019 for final year CSE students. Mr. Charles Antony, Techno-voice, Mysore was the resource person of the workshop.

Java is one of the most popular programming languages used to create Web applications and platforms. It was designed for **flexibility**, allowing developers to write code that would run on any machine, regardless of architecture or platform. Students were trained on various aspects of advanced java like as stated above.

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

PLACEMENT NEWS

IBM

- SHETTY VIGNESH SURESH
- DEEPASHREE V

INFOSYS

- MINAL PINTO
- NIKSHITHA
- ANVAYA KINI

VALTECH

- POOJA T S
- SWARNA GOURI R S

TCS

- CHANDAN RAMESH SHASTRI

EY

- GANESH PRASAD E
- SUSHMITHA H S
- THAIZEERA A S

AMAZON

- AISHWARYA J SHETTY

TATA MOTORS

- PAVAN M R
- VISHWATH PUTTI
- RACHANA S

NINJA CART

- POOJA G HEGDE
- K J MYTHRI
- VISHAL NAIK N
- POOJA R
- SAMEEKSHA HEGDE

MINDTREE

- HARSHITHA K O

NEXTWEALTH

- KAVANA M G
- SHAZIYA BANU

SILVER PEAK

- POOJA

EVERST IMS

- POOJITHA

INSTITUTE VISION

“Transformative education by pursuing excellence in engineering and management through enhancing skills to meet the evolving needs of the community”

INSTITUTE MISSION

- *To bestow quality technical education to imbibe knowledge, creativity and ethos to students community.*
- *To inculcate the best engineering practices through transformative education.*
- *To develop a knowledgeable individual for a dynamic industrial scenario*
- *To inculcate research, entrepreneurial skills and human values in order to cater the needs of the society.*

PROGRAM OUTCOMES (PO'S)

Engineering Graduates will be able to:

1. Engineering knowledge: Apply the knowledge of mathematics, science, Engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

2. Problem analysis: Identify, formulate, review research literature, and analyze complex

4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions

5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

6. The engineer and society: 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.

7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

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

12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES

A graduate of the Information Science and Engineering Program will exhibit:

PSO1: Design, develop, test and maintain the software systems that satisfy the needs of the IT industry.

PSO2: Apply the knowledge of computer networking, database and computations to provide the solutions to the real-world engineering problems.

PSO3: Develop programs and projects using different modern software tools for industrial & scientific applications.

PROGRAM EDUCATIONAL OBJECTIVES

PEO1: Apply the principles of fundamental mathematics and Information Science & engineering to provide solutions to the real time problems.

PEO2: Pursue higher education and engage in research to meet the challenges of the latest technologies.

PEO3: Design and develop reliable software systems to satisfy the industrial needs through multidisciplinary projects.

PEO4: Able to work in various IT related fields and contribute to the society.