KINGS COLLEGE OF ENGINEERING
Recognised under 2(f) & 12(B) of UGC
Approved by AICTE, New Delhi.
Affiliated to Anna University, Chennai.
ACCREDITED WITH GRADE B++ NAAC

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2023-2024(EVEN)

REPORT – BRIDGE COURSE (II-EEE)

The Department of Electrical & Electronics Engineering conducted a bridge course for II-EEE students on March 13th and 14th, 2024. This program featured two subjects, **Transmission and Distribution** and **Microprocessor and Microcontroller**. The primary objective was to establish a strong foundation in these core subjects, equipping students with essential knowledge and skills as they continue their academic journey in the field of Electrical and Electronics Engineering.

PROGRAMME SCHEDULE

DATE & SESSION: 13.03.2024 (FN & AN)

SUB: EE3401 – TRANSMISSION AND DISTRIBUTION

TIME	TOPICS	FACULTY INCHARGE
09.15 A.M – 09.30 A.M	Introduction by HOD and Class In charge	
09.30 A.M – 10.45 A.M	Overview of power systems and their components	Dr. S. Sivakumar VP & HEAD (T & P)
11.00 A.M – 12.30 P.M	Basics of generation, transmission, and distribution.	Dr. P. Narasimman, AP/EEE
01.10 P.M-01.55 P.M	Basics of transmission lines and conductors.	Dr. S. Naveen Prakash, AP/EEE
01.55 P.M-02.40 P.M		
02.50 P.M– 04.20 P.M	Types of faults and their effects on power systems.	Dr. A. Prabha, AP/EEE

PROGRAMME CONTENT:

The bridge course commenced with an informative introduction by **Mr. R. Sundaramoorthi, HOD/EEE**, setting a welcoming tone for the day ahead. He also introduced the class in charge, **Dr. S. Vasantharaj, AP/EEE,** who would play a pivotal role in the management of classes. They both provided a brief overview of the course objectives, encouraging everyone to actively participate and engage in the learning process.

Dr. S. Sivakumar, our esteemed **Vice Principal and Head of Training & Placement**, took the stage to delve into the fascinating world of power systems. With clarity and enthusiasm, Dr. Sivakumar elaborated on the **Fundamental Concepts of Electricity Generation,**

Transmission, and Distribution. He emphasized the importance of power systems in our daily lives, making complex topics accessible to all attendees.

Following the enlightening overview, **Dr. P. Narasimman**, **Assistant Professor/EEE**, delved deeper into the intricacies of power generation, transmission, and distribution. Through engaging explanations and real-world examples, Dr. Narasimman demystified the complexities of various generation sources, transmission lines, and distribution networks, fostering a deeper understanding among the participants.

In the subsequent session, **Dr. S. Naveen Prakash**, **Assistant Professor/EEE**, guided attendees through **The Essential Concepts of Transmission Lines and Conductors**. With clarity and expertise, Dr. Prakash elucidated the role of transmission lines in delivering electricity efficiently and safely. Participants gained insights into the different types of transmission lines and their applications in power distribution networks.

As the afternoon session unfolded, **Dr. A. Prabha**, **Assistant Professor/EEE**, shed light on the **Different Types of Faults** that can occur in power systems and their impact. Through engaging discussions and practical examples, Dr. Prabha underscored the importance of fault detection and mitigation strategies in ensuring the reliability and safety of power systems.

At the end of the first day of the bridge course, participants found themselves enriched with a comprehensive understanding of power systems. From the intricate processes of electricity generation to the vital role of transmission and distribution networks, attendees gained valuable insights into the backbone of modern infrastructure.

DATE & SESSION: 14.03.2024 (FN & AN)

SUB: EE3404- MICROPROCESSOR AND MICROCONTROLLER

TIME	TOPICS	FACULTY INCHARGE
09.15 A.M – 10.45 A.M	Introduction to Microprocessors and Microcontrollers:	Mr. R. Sundaramoorthi, HOD/EEE
11.00 A.M – 12.30 P.M	Basics of digital logic gates and circuits.	Dr. P. Narasimman, AP/EEE
01.10 P.M-01.55 P.M	Overview of microprocessor architecture, including registers, ALU, and control unit.	Mr. S. R. Karthikeyan, AP/EEE
01.55 P.M-02.40 P.M		
02.50 P.M– 04.20 P.M	Basics of writing and compiling C programs for microcontrollers.	DR. S. Vasantharaj, AP/EEE

PROGRAMME CONTENT:

The second day of the bridge course focused on **Microprocessor and Microcontroller**, aiming to provide a comprehensive understanding of these essential components in electronics. **Mr. R. Sundaramoorthi, HOD/EEE**, commenced the day with an **Introductory Session on Microprocessors and Microcontrollers**, elucidating their significance in contemporary technology and setting the stage for our learning journey. Through insightful discussions and practical examples, participants gained valuable insights into the functions and applications of these components.

Following the introduction**, Dr. P. Narasimman, Assistant Professor/EEE**, led a session on **The Basics of Digital Logic Gates and Circuits**, enhancing participants' understanding of digital electronics through interactive discussions. Dr. Narasimman's expertise and engaging teaching style facilitated an enriching learning experience, empowering participants to grasp the concepts with clarity.

In the subsequent session, **Mr. S. R. Karthikeyan, Assistant Professor/EEE**, provided a comprehensive **Overview of Microprocessor Architecture**, immersing participants in a detailed exploration of registers, ALU, and control units to gain a deeper understanding of their collaboration in processing data and executing instructions. Mr. Karthikeyan's in-depth explanations and illustrative examples reinforced participants' comprehension of microprocessor fundamentals.

During the afternoon session, **Dr. S. Vasantharaj, Assistant Professor/EEE**, expanded participants' knowledge by delving into the intricacies of **Writing and Compiling C Programs for Microcontrollers**. The students acquired essential programming skills and learned how to apply them in controlling microcontroller-based systems. Dr. Vasantharaj's interactive teaching approach and practical insights provided participants with valuable learning experiences.

In summary, the program scheduled for II EEE on **March 13th and 14th, 2024**, provided students with a well-rounded introduction to the key subjects in their curriculum. Each session was conducted by experienced faculty members, ensuring that students received a solid foundation for their studies in **Transmission and Distribution and Microprocessor and Microcontroller** subjects.

Captured Moments: Highlights of Bridge Course Program (II-EEE)

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<td>Overview of Electricity Generation, Transmission, and Distribution by Dr. S. Sivakumar, Vice Principal.</td>
<td>Intricacies in power generation, transmission, and distribution by Dr. P. Narasimman, AP/EEE.</td>
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<td colspan="2">Overview of writing and compiling C-program for Microcontrollers by Dr. S. Vasantharaj, AP/EEE</td>
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FACULTY INCHARGE

HOD/EEE

PRINCIPAL