

About SUSIEC

The Institution of Electronics & Telecommunication Engineers (IETE) Bangalore Centre has been organising Summer School in Electronics & Computers (SUSIEC) since three decades for 9th and 10th standards students during their summer vacations with a motto of “**catch those young**” and motivate them to choose the fascinating field of Electronics and Telecommunication as their chosen profession/carrier. Taking the lead from Bangalore centre, other centers of IETE has been conducting such programmes. Bangalore centre has also conducted SUSIEC in the rural areas like Kolar. This summer school (SUSIEC) provides a unique opportunity/Platform for students to learn right from fundamentals to the state-of-the-art technology and to interact with Industry Experts/Eminent academicians.

SUSIEC 2017

Following the set traditions, SUSIEC 2017 is scheduled from 23rd April 2017 to 17th May 2017. SUSIEC 2017 is going to come with enhanced/transformed syllabus with state of the art topics of current day relevance like the Internet of Things (IoT), embedded systems with Arduino platform, wireless technologies, MATLAB, Android Application, hardware design in addition to the regular basics in Electronics and Telecommunications. SUSIEC also provides laboratory time for practical experiments to enable students to make projects of their choice from the chosen topics.

The School comprises **two** hours of technical presentations followed by two hours of practical's on all the days.

The students will be distributed in to smaller teams with 2 to 4 students in each team and the team will undertake a relevant project. Each team will develop a concept design and a mentor will guide and support each project group. An exhibition will be arranged and the projects are rated by the eminent personalities, the best selected projects will get awards.

Eligibility

Students of 9th and 10th standards of academic year 2016-2017

Venue:-IETE Bangalore Centre

Bellary Road, Ganganagar Extension,
Bangalore –560 032.

Fees:-Rs.5000/- Per Candidate.

Fees: - The fee is the bare minimum to meet the course requirements including good tools and components for Practical. The tools & the project work will remain the property of the students.

The fee includes cost of components, wiring & tools, project guidance, course material, hands on simulating Tools, extended Session on Practical's , refreshments during break.

Important Dates

Last date for Admission

: Saturday, 22nd April 2017

Course Inauguration

: Sunday, 23rd April 2017

SUSIE PROGRAMME 2017

Sl No	Day & Date	COURSE CONTENT
1	Sunday, 23 rd April 2017	Inaugural function & Introduction to SUSIE 17
2	Monday, 24 th April 2017	FUNDAMENTALS OF ELECTRICAL & ELECTRONIC ENGG:- Introductions to electronics -Basics of Atomic Structure, Electricity & electronics Fundamentals of Electrical Circuits, & Electricity
3	Tuesday, 25 th April 2017	FUNDAMENTALS OF ELECTRONIC CIRCUIT DESIGN: Fundamental Principles-The Basics, Voltage and Current, Resistance and Power, Sources of Electrical Energy, Ground, Electrical Signals, Electronic Circuits as Linear Systems. Magnetism, Active & Passive Components, Ohms Law, Effects of electric current, Faradays laws of electromagnetic Induction.
4	Thursday, 27 th April 2017	Fundamental Components: Resistors, capacitors, and Inductors. Source and Load- Practical Voltage and Current Sources, Thevenin and Norton Equivalent Circuits, Source and Load Model of Electronic Circuits
5	Friday, 28th April 2017	Special Lecture- I On Introduction to Hardware design
6	Saturday, 29 th April 2017	ALTERNATING CURRENT CIRCUITS:- Parameters of AC, Transformer, Rectifiers & Power Supplies, Behavior of RLC in AC circuits, resonances, Q factor, Dynamos, Generators & Motors,
7	Sunday, 30 th April 2017	SEMICONDUCTOR DIODES, TRANSISTORS & Its Applications:- Diodes- Diode Basics, Diode circuits, Electrical Conductivity-Energy bands in solids, Band structure and conductivity.
8	Monday, 1 st May 2017	Semiconductors- Intrinsic semiconductors, Doped semiconductors, p-type & n-type material.
9	Tuesday, 2 nd May 2017	ELECTRONIC CIRCUITS: - Fundamentals of Electronic Circuit Design, Amplifiers, Oscillators, Multi vibrators, Schmitt Trigger, Piezo- electric effect, Crystals, Transducers & sensors
10	Thursday, 04 th May 2017	FOUNDATIONS OF ANALOG AND DIGITAL ELECTRONIC CIRCUITS: The lumped elements, limitations of the lumped circuit, batteries, Wires, element laws, signal representation, analog signals, digital signals, analog Vs digital signals,
11	Friday, 05th May 2017	Special Lecture-II Introduction of Embedded system with Arduino platform

12	Saturday, 06 th May 2017	BASICS OF ANALOG & DIGITAL COMMUNICATIONS SYSTEM: Elements of an electrical communication system, Characteristics of communication channel and their mathematical modeling,
13	Sunday, 07 th May 2017	Fundamentals of communication systems, Basic concepts of Analog and digital transmission systems, Modulation, Demodulation process, MUX/DEMUX Technique.
14	Monday, 08 th May 2017	DIGITAL ELECTRONICS:- Logic circuits and logic families, registers and counters, Memories, the evolution of the Microprocessor & Micro Controllers
15	Tuesday, 9 th May 2017	Introduction to MATLAB
16	Thursday, 11 th May 2017	Computer-II
17	Friday, 12th May 2017	Special Lecture-III Introduction to Android Application
18	Saturday, 13 th May 2017	INTRODUCTION TO PRACTICALS & PROJECT WORK (3 Days)
19	Sunday, 14 th May 2017	FINALTEST- THEORY
20	Monday, 15 th May 2017	FINALTEST-PRACTICALS AND EXHIBITION OF PROJECTS

For further details contact:

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