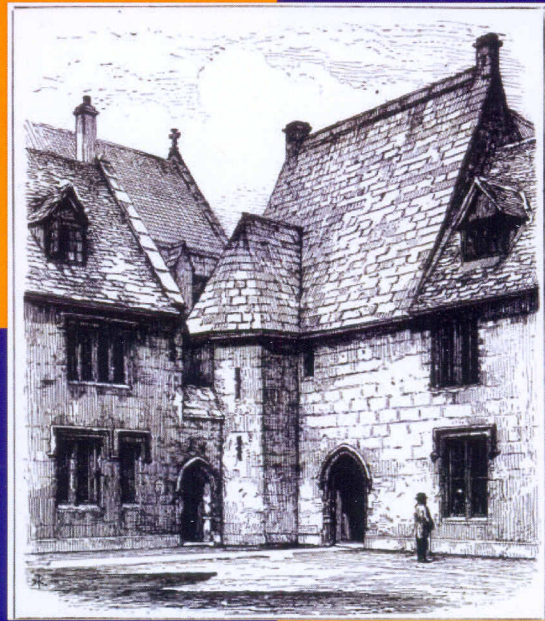


It's high time things changed!



If there is anything that has not changed for too long, It is the way we learn electronics.



Innovative lab infrastructure solution for teaching & learning electronics



What is Zealtech Workbench?

It is a new innovative approach to learning and teaching electronics. It is designed and developed after extensive research and consultations with senior professors and faculty of electronics from different institutions across the country.

Focus on strong fundamentals

Today, almost all branches of engineering need to have exposure to basic electronics. Besides the circuit branches, mechanical and civil engineering students also should have a fair idea of how electronics work, as more and more electronics is getting integrated in to machines and buildings. Without a thorough understanding of the basics of electronics, one cannot become a successful engineer in the future.

Present Scenario

Traditionally, trainer kits and breadboards are used in devices and circuits labs. Of late there is growing opinion against use of trainers. Several leading educationalists and academicians feel that the trainer kits do not expose students to the real underlying circuitry. Therefore the professors and faculty have picked up the other available alternate that is breadboard.

Using breadboards

Breadboard is an innovative product and technique. The components are issued from the stores and the student can rig up the circuit in the breadboard and complete the study of the circuit. This is quite effective way compared to trainers.

Why Change?

The engineering education is undergoing a critical phase. The hitherto upheld methods and practice are being questioned by parents and students who are more aware and concerned. The sheer number of students handled by the engineering colleges is growing rapidly. Institutions who were handling 60 students in a year in BE ECE course are now admitting 300 students and more. There is tremendous pressure on the present system to cope up with the growing demand. Also there is dearth of qualified faculty members with required experience to teach and guide the students. Therefore there is a need to innovate and change to a new methodology and process that would address These concerns and provides better opportunity to the students.

Solution

Zealtech Workbench based labs address all the above concerns. It saves time to complete an experiment by 25% and delivers better learning/ understanding. It motivates the students as they get an opportunity to do more than simple functional verification and learn some of the design aspects.

Components of a ZW Lab

- Network of Simulation Stations
- Easily accessible verification boards
- T&M Equipment
- Practice tools
- Structured Power supplies
- Workbooks, on-line manuals and datasheets
- Ergonomically laid Workcenter

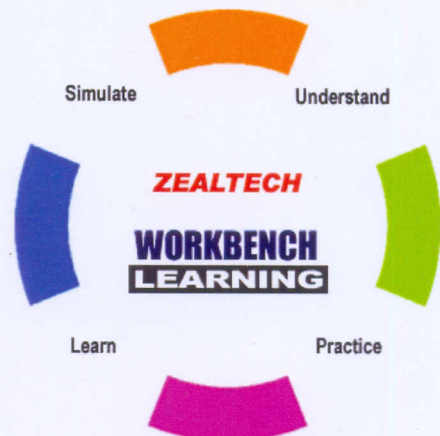
Methodology used

Zealtech workbench provides a holistic learning experience derived from the best of world's viz., simulation and hands-on practice. The students are guided through a structured set of experiments to deliver the much needed fundamental knowledge to learn electronics better. It is innovative, less dependency on the faculty, enables self-learning and delivers comprehensive coverage. Write to us to know more about the new zealtech workbench methodology*

Zealtech Workbench based Electronics Learning

Typical Lab Process

- Online Pre-lab test
- Lab Instruction with the feedback from the prelab test
- Verification through Simulation
- Case study - Trouble shooting
- Hands-on practice - Breadboard / PCB
- Lab record
- Analysis & Applications
- Post lab Test





15 Reasons to choose Zealtech Workbench Based lab infrastructure

Provides a strong foundation for the students enabling better understanding of advanced subjects

Improves the utilisation of new technology equipments, as the students are thorough and confident of using these equipments.

Provides alternate evaluation method to assess the student's understanding.

The infrastructure is scalable and future proof. This infrastructure can be upgraded to become a center of excellence in electronics in future.

It is easy to manage and administer

Reduces the overall cost of labs and cost of maintenance substantially

This can be a 24 x 7 facility and will go a long way in establishing leadership in higher education in electronics.

Single point contact for all support and maintenance. Zealtech, with more than 10 years experience in delivering products and services to education market can assure this.

Innovative new methodology - taking advantages of both simulation and hands-on practice.

It is a very cost effective way to learn - Students can try new circuits and develop design capabilities without spoiling the components.

Knowledge of electronics has become and will be an essential requirement even for students pursuing non-electronics courses. This lab can help even non electronics students to learn electronics in a systematic way.

With this infrastructure, the students can do the projects themselves, within the campus. Good projects can help students, aspiring for higher studies abroad, in getting aid.

Assists homogenization: Addresses the disparity in the student input quality and helps the faculty in reaching the students better.

Authentic and consistent knowledge transfer. Less dependency on the faculty and driven more by the system and continuously upgraded courseware.

Comprehensive coverage. The students will get confidence to face interviews and take up challenging assignments in electronics industry. Today, the top electronics companies visit only premier institutions such as IITs.