### **Education & Academics**

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# THE OYSTER LAB

The OLAB a chapel of technology at BITS. The ergonomic chairs at each workstation ensure that only the mind is taxed during lab sessions, which the students enjoy in air-conditioned comfort. 17" flat screen monitors, a central server to which all the terminals are connected... did someone say state-of-the-art?

**TUCKED** away on the second floor of what old timers speak of as the M-block is the Oyster Lab. With thirty-six terminals, each with a sleek 17" monitor, some of the most advanced software around, surely the label of state-of-the-art is warranted. The walls are adorned with portraits of pioneers in the development of semiconductor devices. The walls also have posters exhorting the students to "Be the next Silicon Revolutionary!" All of these point the students towards the ultimate aim: of producing a microchip developed completely in house, at BITS.

## **INCEPTION AND GROWTH**

The lab is a product of a Rs. 200 crore initiative by BITS and its alumni to make BITS, Pilani the most technologically advanced institute in India. The first of its kind in the country, the lab aims to promote research in silicon technology and chip development. The OLAB will also have an extension at Bangalore to allow the students at BITS to work closely with industry. Partners in the industry will include OpenSilicon, Magma and Broadcom. The Bangalore lab is still in the planning stages and a site will be selected soon.

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## **COURSE TOOLS**

The OLAB is being utilized for courses like Analog and Digital VLSI Design (ADVD) as well as higher degree courses like VLSI architecture and Analog IC design. Plenty of projects which require use of the the lab's tools have been allotted this semester. The facility is also used by some professors and Ph.D. students for research.

Everyone using the OLAB is learning together, and professors and students often explore the nuances of the various tools at the same time. Some students who have used similar design tools at their PS II stations contribute as well. Demo sessions, in which



the usage of the tools is discussed, are held on a regular basis. The students can also interact with professors as well as people from the industry on the forum that has been set up at <u>http://oysterslab.bits-pilani.ac.in</u>

The tools available in the OLAB are the same tools that are being used for VLSI chip design in the industry at present. Having experience of this kind at the under-graduate level will no doubt give BITSians an extra edge.



## **FUTURE PROSPECTS**

The OLAB still has vast potential to grow. At present, more courses are being structured to include OLab components, while the projects allotted are increasing in complexity. However, there is a need for more input from the industry. If more challenging projects are offered by the industry, the students will soon gain better skills.

The OLAB is also closely connected with the Technology Business Incubator at BITS. The faculty extends an open invitation to alumni to return and make the most of this cutting-edge technology to aid their own start-ups. The faculty certainly hopes that the lab and other facilities will aid entrepreneurial alumni in the long run.

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