

**Educational Tour of M.E Students
to Hyderabad**
organized by
Gujarat Technological University, Ahmedabad
in association with
Seer Akademi, Hyderabad

The ME program in VLSI and Embedded System Design is highly practice-oriented, wherein the practical work is given a very high importance

First Day – Seer Global Class Room at JNTU and Seer Incubation Center

The students had interaction with the JNTU students and exchanged their views on various subjects.

They were shown the incubations taken up by the JNTU students and had full details of the process followed. The incubations Virtual Me, 3D and Digital Books were shown to the students. This has inspired the students to take up new plans and has given insight to incubation.

Second Day– Astra Microwave Products Ltd.

Astra Microwave designs, develops and manufactures subsystems for RF and microwave systems used in defense, space, meteorology and Tele communication. The students were briefed about the products that the company was making, and the overall history of the company by its marketing head. The students were briefed about MMICs (Monolithic microwave integrated circuits) that they were working on. This is completely a new domain for students, so they found it very interesting. They also saw the transmitter and receiver board for automatic antenna rotation system, how the chips were tested at different temperatures and how they were tested for vibration and clean room.

Third Day- Sulakshana circuits limited.

The students were exposed to whole PCB design process, single sided, dual sided and multi



Lab Equipments at Asta Microwave Products Ltd.





Lab Equipments at Asta Microwave Products Ltd.



layered PCB (this is 8 layers PCB) and machines used in PCB designing. They had practical exposure in PCB manufactured from Gerber file given to them. They also had practical exposure to CNC drilling, Photo lithography, soft soldering, component placement Bare Board

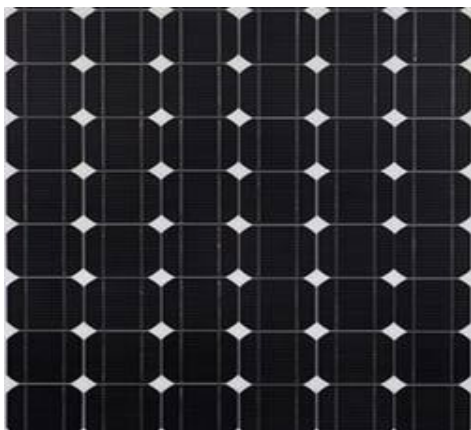
Testing and final quality control. A demonstration at every stage was organized. They also had exposure to whole embedded system hardware course in practical.



Students at Sulakshana circuits limited.

Fourth Day– Karishma Solar PVT. LTD.

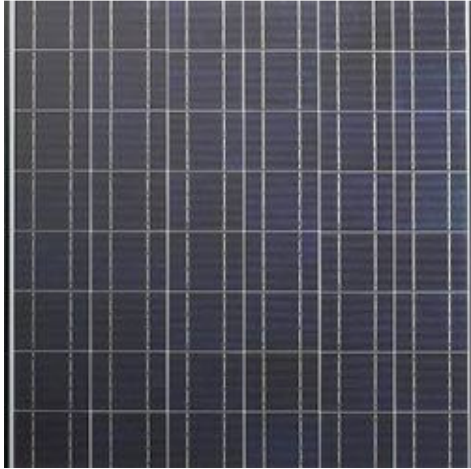
Karishma manufactures PV panels and systems and offers solar mono crystalline module and solar poly crystalline modules. The students saw solar cells and frames made from quartz and silicon having voltage capacity of 0.5v and different watts. They saw each stage that solar cell passes before they are handed over to the end user i.e. tabling, stringing, layout, lamination, frame fixing and junction box fixing.



Solar monocrystalline at Karishma Solar



Solar-panels at Karishma Solar



Solar-poly-crystalline structures at Karishma Solar

Fifth Day – Industrial Park.

The students were taken to Industrial Park where all the Software and Hardware Companies were located and had interaction with the their Technical Managers. They were given a brief on the various activities that happens in Frontend and Backend. This was highly useful to them.

Conclusion

The Educational Tour organized by Gujarat Technological University in association with Seer Akademi was true in its spirits and sense as students experienced and practiced in Microwave Circuits, total PCB process, Chip designing and testing, new technologies in Solar industry and Incubations.

This was a great experience to the students to understand the wonderful dynamics of Microelectronics in a practical manner. This has given an opportunity to expand students' horizons and interest in manufacturing of hardware and paved the way to practice the same back in Gujarat.

The Incubation Center was of special attention since through this visit, the students learnt about the things, one has to do for producing a marketable product.

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