Yearly Plan for IQAC 2009-2010
School of Electronics, DAVV, Indore

1. Preparation of Course Curriculum:

School is running Five post graduate programs viz. M.Tech Mobile Computing Technology, M.Tech Spatial Information Technology, MTech Embedded System, M. Sc Electronics and M.Sc Electronics and Communication. All the three M.Tech courses are AICTE approved. M.Tech Mobile Computing is UGC sponsored "**Innovative Course**" course. All the courses have theory as well as practical type subject learning outcomes. In each semester we are having 4 to 5 papers of 04 credits each(three hours theory for each paper per week) and 10-12 credits laboratory work (20-24 hours per week). We give various type of assignments to the students regularly. Surprise Tests, Seminars, Quizzes are regularly arranged in all subjects. The intake strength for M. Sc Electronics and M.Sc Electronics and Communication is 40, for M.Tech Spatial Information Technology, MTech Embedded System is 18 and for M.Tech Mobile Computing Technology is 25.

2. Strategies of Teaching Learning

A. Teaching Method*:* School uses both MMP and blackboard teaching. More focus on MMP.

Laboratories: School has well equipped laboratories which help the students to understand the systems practically and have been setup at the cost of above Rs. 1 Crore. Students themselves perform experiments on the sophisticated and costly instruments. Tools available are

- *VLSI & Embedded systems Lab*: **EDA Tools**- Mentor Graphics HEP-1 and 2, Xilinx9.2, Tanner Tool, Cadence, Synopsis, Active HDL, TI DSP Processor 6000 Series, MATLAB and toolboxes, 8051 & ARM Keil IDEs, Rabbit PIC Microcontrollers and PICTail, VGA with Touch screen QVGA, FPGA and CPLD Development kit.
- *Spatial Information Technology Lab*: LPS GEOMATICA ENVI version 10.1 & 10.2, ArcGIS 9.3, GPS Handheld receiver, GPS Trainer Kit, LabView 7.0 with Data Acquisition Card, GPS Bluetooth Data Logger, GPS Vehicle Tracker
- *Microcontroller & Microprocessor lab:* 8051, 68HC11, 80c196 Emulator, Embedded Workbenches for intel 8051,Motorola 68HC11, intel x96 microcontrollers 8031/8051 Microcontroller Tra iner Kit
- *Mobile Computing Technology Laboratory:* GSM Trainer Kit, RFID Trainer Kit, CDMA Trainer Kit, RFID Reader and Development Kit, Mobile Exchange Trainer Kit, QAM Trainer Kit
- *Computer Lab:* 100+ Pentium Computers

B. Evaluation of Student

- The continuous evaluation system is already in place as per ordinance 31. This includes periodic tests, quizzes, assignments, seminars etc in every theory papers taught.
- Introduction of CBCS Scheme: The CBCS scheme is already prevalent in most of leading IITs in their curriculum and its advantages are greatly student's career oriented. The department plans to introduce CBCS scheme from next academic year

C. Industrial Visit: Students visit the electronic industries/organizations to study the actual application of various electronics processes.

D. Expert Lectures Delivery*: Various expert lectures on different topic have been arranged for the overall growth of students. Some of the lecture are*

- **"Mobile Operating System"** by Mr. S.R. Reddy, IGIT IP University, Delhi, on 24th – 25th April, 2009
- **"Software Component Technologies"** by Dr. T.V. Gopal, Department of Computer Science & Engineering, Anna University, Chennai on 28th March, 2009
- " **Motivation**" by Dr. S.W. Chitle on 16th -17th February, 2009.
- "**GIS and Remote Sensing**" by Dr. S.K. Soni, Professor , Civil Engg. Department, SGSITS, Indore on 24th Jan, 2009.
- "**Time Management**" by Mr. Amit Bhattacharya, Head ICFAI Training Section on 06th Jan, 2009

3.A Student feedback system design

Students feedback is taken at the end of every semester for all the subjects and for all concerned faculty members. In addition to semester end feedback form submission, we arrange students teachers meeting for discussing their problems regarding teaching and research during the semester to resolve the problems. The design of the questionnaire is as prescribed by NAAC.

B. Format of analysis

The IQAC committee of the School analyzes the feedback form statistically giving due weight to each quality related parameter. Scores obtained by each teacher for each course that he/she taught is conveyed in confidentiality to him/her.

4. Awards

Gold Medal awarded yearly to the topper of M.Sc. Electronics was established by Mr. Salil Sharma in the year 2006.

5. Scholarship

A. *Merit Scholarship:* Scholarship awarded per semester on the Merit basis to Top two students of M.Sc Electronics @ Rs. 2000 per semester.

B. *Merit cum Means Scholarship:* Scholarship awarded per semester on the Merit basis and on the basis of financial background, to two students of M.Sc Electronics @ Rs. 2000 per semester.

C. *AICTE Scholarship:* AICTE scholarship awarded to the M.Tech students @ Rs. 8000/- per month. 39 students are getting the scholarship in the current academic year.

D. *P.G. Scholarship:* Mr. Rakesh Kumar Meena of M.Sc. Electronics & Communication Batch 2007-09 was selected under the "**UGC PG Scholarship for SC/ST students**" @ Rs. 3000/- per month.

6. Improvement plan

A. Plan on improvement in Infrastructure:

School has modern Building with beautiful garden, fully Wi-Fi, Departmental Library with 10000+ books, 24x7 Internet, Multimedia/ LCD in every classroom/Lab and full power back up in the laboratories/class rooms. Since school runs 5 courses, improvement of infrastructure is going on.

B. Plan for research activity & promotion:

(i)MOUs and Collaborations: The department has signed MOU with I^2IT Pune, RRCAT Indore and CEERI, Pilani

(ii)Research projects carried out: Many research projects have been sanctioned to departmental faculty by different funding organization. Recently in the year 2008, UGC has granted Innovative Programme Project to start M.Tech (Mobile Computing Technology) with seed funding of Rs. 50 lakhs. In addition, UGC has also sanctioned Rs. 19 lakhs under Infrastructure grant and XI Plan. The

department expects new faculty members to join soon by July this year. This will have positive impetus to R&D Development in the department.

C. Setting up of new Laboratories: School is planning to set up new advanced laboratories:

- *Database Laboratory*
- *RTOS Laboratory*

D. Starting of New Courses: Department is planning to start new courses:

- *M.S. by Research in Embedded System*
- *M.Tech Integrated (5 years) in VLSI Design/Embedded System*
- *Diploma course in DSP*
- *Diploma course in Embedded system*
- *Diploma in VLSI design*
- *Certificate course in DSP (Duration: Six Months)*
- *Certificate course in Embedded System (Duration: Six Months)*
- *Certificate course in VLSI design (Duration: Six Months)*

E. Plan on improvement in Relationship with stakeholders

Parent-teachers meet : School organizes Parent-teachers meet regularly which has definitely improved the relationship between faculty and parents. The meet was organized on 08th Sep, 2007 & on 24th Jan, 2009. Such interactions have also enabled us to know parent's expectations from us. School also plans to hold the number of meetings of teachers-students (besides the class), teacher–teacher so that interaction among them will definitely lead to improvement in the academic quality of the School.

Alumni Activities: The School already maintains separate Alumni Cell in the department. The functioning of the cell is spanned over organizing expert lectures, soft skill development of students, organizing Cultural Activities of department and other Co-curricular and Extra-curricular activities for the students of the department.