AMRUTVAHINI COLLEGE OF ENGINEERING, SANGAMNER
DEPARTMENT OF ELECTRONICS ENGINEERING
COURSE OUTCOMES (CO)
BE 2012 Course

VLSI Design (404201) , BE- Sem-VII

After successfully completing the course students will be able to,

Co. No.	Description
1	Understand VLSI Design Flow.
2	Design any digital circuit using VHDL.
3	Understand the importance of testability in chip design.

Electronics system Design (404202) , BE- Sem-VII

After successfully completing the course students will be able to,

Co. No.	Description
1	Understand various stages of hardware, software and PCB design.
2	Importance of product test & test specifications.
3	Special design considerations and importance of documentation.

Advanced Power Electronics (404203) , BE- Sem-VII

After successfully completing the course students will be able to,

Co. No.	Description
1	Understand the operation of modern power converters and multilevel inverters.
2	Understand the basic principles of power electronics in drives and its control, types of drives and basic requirements placed by mechanical systems on electric drives.
3	Understand the operation of 1ϕ & 3ϕ converter drives for separately excited & series DC motors.
4	Learn speed control of induction motor drives in an energy efficient manner using power electronics.
5	Learn and understand working of cylindrical rotor motor, salient pole motor, reluctance motor and permanent magnet brushless DC motor drives.

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COURSE OUTCOMES (CO)
BE 2012 Course

Embedded Systems & RTOS (404204), BE- Sem-VII

After successfully completing the course students will be able to,

Co. No.	Description
1	Consider the different constraints of embedded system.
2	Understand Real time systems concepts.
3	Do the analysis Linux operating system as real time operating system.
4	To use RTOS for different embedded systems.

Robotics & Automation (404205) ,BE- Sem-VII

After successfully completing the course students will be able to,

Co. No.	Description
1	Understand Need of Automation. Demonstrate use of engineering methods and problem solving towards design of the specified robot.
2	Compare and contrast various mechanical systems, and the industrial application of robotic and automation.
3	Identify prerequisites of Robotics for small industrial Applications.
4	Describe Robot control & its applications.

Mobile Communication (404205) , BE- Sem-VII

After successfully completing the course students will be able to,

Co. No.	Description
1	Understand the fundamentals of cellular system & radio propagation.
2	Design mobile communication system by appropriately selecting necessary techniques.
3	Analyse different wireless networking & communication systems & standards.

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COURSE OUTCOMES (CO)
BE 2012 Course

Computer Network (404209) ,BE- Sem-VIII

After successfully completing the course students will be able to,

Co. No.	Description
1	Design, implement, and analyze simple computer networks.
2	Identify, formulate, and solve network engineering problems.
3	Use techniques, skills, and modern networking tools necessary for engineering practice.
4	Have a basic knowledge of the use of cryptography and network security.

Process Automation(404210) ,BE- Sem-VIII

After successfully completing the course students will be able to,

Co. No.	Description
1	Describe process control principles.
2	Solve issues related to efficient controller design.
3	Understand Advance Process Automation Techniques.
4	Utilize knowledge of PLC programming for Process Automation.
5	Design GUI for process industry using LABVIEW Software.

Audio Video Engineering (404211), BE- Sem-VIII

After successfully completing the course students will be able to,

Co. No.	Description
1	Understand the concept of basic television signal processing.
2	Identify globally accepted colour TV standards.
3	Demonstrate the need of audio and video compression techniques in real life.
4	Acquire knowledge of latest digital TV systems and applications.
5	Describe the attributes of acoustics, sound engineering and storage media.

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COURSE OUTCOMES (CO)

BE 2012 Course

Optical and Microwave Communication (404211) , BE- Sem-VIII

After successfully completing the course students will be able to,

Co. No.	Description
1	Understand advantages and applications of optical and microwave communication.
2	Identify different optical and microwave devices with their operating principle.
3	Formulate optical and microwave communication problem for synthesis.

Mechatronics (404212) , BE- Sem-VIII

After successfully completing the course students will be able to,

Co. No.	Description
1	Work in interdisciplinary field. Describe how to optimize Mechatronics system.
2	Implement software for control of Mechatronics systems.
3	Interpret and apply current or emerging knowledge from inside and outside Mechatronics Engineering.
4	Use relevant mathematics and computer science concepts as tools.