



Date :23rd October, 2017

FACULTY OF ELECTRICAL AND ELECTRONICS

Minutes of Board of Studies Meeting held on 20-10-2017

Venue: Conference Hall, Central Library, Sathyabama University, Chennai-119

- The Faculty Head, Dr.E.Logashanmugam greeted and welcomed all members of Board of studies. The HODs of ECE, EEE, E&I, E&C and ETCE under the Faculty of Electrical and Electronics, Staff members from the faculty attended the meeting to have an effective interaction with the members as and when required.
- Dr.V.Sivachidambaranathan, Prof.& Head, Dept. of Electrical and Electronics Engineering requested Dr.Radhika.S, Faculty/EEE to put forth the feedback collected from Staff and 2014 – 2016 Batch Students and requested the board members to approve for the shift in the course titled “Digital Signal Processing & its Applications” (SEC1315) to Semester 6 in 2015 Regulations. With respect to this change the course titled “Principles of Embedded System” (SEC1317) is suggested to shift to Semester 7 in 2015 Regulations.
- Dr.V.Sivachidambaranathan, presented the old and new syllabus for Special Electrical Machines before the board and discussed the valid additions made in the syllabus.
- Dr. V. Sivachidambaranathan requested Dr.Vanitha, Faculty /EEE to present the syllabus of the new course, ‘Energy Storage Systems’ for the approval of the board. Dr. A.Amalin Prince approved the Syllabus for this new course.
- The meeting ended with vote of thanks from the Faculty Head Dr.E.Logashanmugam.

Name of the Course: SPECIAL ELECTRICAL MACHINES

Course Code : SEE1307

Unit	Content	Remarks
I	<p>STEPPING MOTORS</p> <p>Constructional features, principle of operation, types, modes of excitation, Torque production in Variable Reluctance (VR) stepping motor, Static and Dynamic characteristics, Applications.</p> <p>Introduction to Drive systems for open loop control, Closed loop control of stepping motor</p>	Inclusion
II	<p>SWITCHED RELUCTANCE MOTORS</p> <p>Principle of Operation, Constructional features, Torque equation, Power Semi Conductor Switching Circuits, frequency of variation of inductance of each phase winding - Control circuits of SRM- Torque – Speed Characteristics, Microprocessor based control of SRM Drive, Applications</p>	Inclusion In order to have an exposure on control circuits for SRM
III	<p>SYNCHRONOUS RELUCTANCE MOTORS</p> <p>Constructional features: axial and radial air gap Motors. Operating principle, reluctance torque – phasor diagram, Speed torque characteristics, Applications</p>	No change
IV	<p>PERMANENT MAGNET BRUSHLESS DC MOTORS</p> <p>Commutation in DC motors, Electronic Commutation- Difference between mechanical and electronic commutators Hall sensors, Optical sensors, Construction and principle of PMBL DC Motor, Torque and E.M.F equation, Torque-speed characteristics, Power Controllers-Drive Circuits, Applications.</p>	No change
V	<p>PERMANENT MAGNET SYNCHRONOUS MOTORS</p> <p>Construction and types, Principle of operation, EMF and Torque equation, Phasor diagram- Torque Speed Characteristics, Power controllers- Self control, Vector control, Microprocessor based Control, Applications</p>	No change