SATHYABAMA UNIVERSITY
(Established under Section 3 of the UGC Act, 1956)
Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600 119, Tamil Nadu. India.

ISO 9001:2008

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	STEPPING MOTORS Constructional features, principle of operation, types, modes of excitation,Torque production in Variable Reluctance (VR) stepping motor, Static and Dynamic characteristics, Applications. Introduction to Drive systems for open loop control, Closed loop control of stepping motor	Inclusion
II	SWITCHED RELUCTANCE MOTORS 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	Inclusion In order to have an exposure on control circuits for SRM
III	SYNCHRONOUS RELUCTANCE MOTORS Constructional features: axial and radial air gap Motors. Operating principle, reluctance torque – phasor diagram, Speed torque characteristics, Applications	No change
IV	PERMANENT MAGNET BRUSHLESS DC MOTORS 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.	No change
V	PERMANENT MAGNET SYNCHRONOUS MOTORS 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	No change