



Proprietary Software



MATLAB



MATLAB is a programming and numeric computing platform used by millions of engineers and scientists to analyze data, develop algorithms, and create models. At EE, IUST we have the latest version of MATLAB/SIMULINK and some associated toolboxes like Sim-Powersystems.



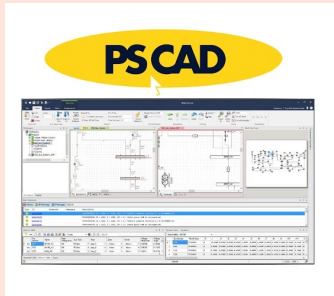
ANSYS Maxwell



Ansys Maxwell is an EM field solver for Electric Machines, Transformers, wireless charging, permanent magnet latches, Actuators and other Electro-mechanical devices. It solves static, frequency domain and time varying magnetic and Electric fields. Maxwell also offers specialized design interfaces for Electric Machines and power convertors. With Maxwell, one can precisely characterize the nonlinear, transient motion of electromechanical components and their effects on the drive circuit and control system design. Maxwell's advanced electromagnetic field solvers can be linked to the integrated circuit and systems simulation technology and performance of electromechanical systems can be analysed before building a prototype in hardware. EE, IUST purchased ANSYS in 2021.



PSCAD



PSCAD (Power Systems Computer Aided Design) is a powerful and flexible graphical user interface to the world renowned, EMTDC electromagnetic transient simulation engine. PSCAD enables the user to schematically construct a circuit, run a simulation, analyse the results, and manage the data in a completely integrated, graphical environment. Online plotting functions, controls and meters are also included, enabling the user to alter system parameters during a simulation run, and thereby view the effects while the simulation is in progress. EE, IUST purchased PSCAD in 2018.