PES group’s Rahul Sharma has been awarded the UQ 2015 ECR grant for the Project *Model-based control as a tool for advanced management of battery storage in electricity distribution grid and vehicle applications*. Battery storage systems are widely attributed as the ‘game-changers’ in electricity distribution grid and vehicle applications due to their ability to deliver technical and financial benefits both to the industry and the customers. While rapid progress is being made in developing cheaper battery materials, few breakthroughs have emerged in best possible battery usage when connected with renewable generators such as wind turbines. The project will deliver a new model-based control algorithm that will lead to improved battery performance, safety and longevity that are essential to enhance battery affordability and reliability in grid and automotive applications. The project will also deliver an experimental setup comprising of an interconnection of Real-Time Digital Simulator (RTDS), lithium-ion battery and a laboratory wind turbine setup. This setup will be beneficial to perform cutting edge research for the development and testing of control algorithms for future power networks.