

Department of Electronics and Communication Engineering

MODELLING & SIMULATION LAB

The job profile of an Engineer not only includes so-called “hard-skills” (e.g. specifying, programming, or building architectures) but also “soft skills” like awareness of team effects and similar human factors. These skills are typically hard to teach in classrooms, and current education, hence, mostly focuses on hard rather than soft skills.

The Modelling & Simulation Lab is one of the most important labs for post graduate engineering students. This is the Post graduate level laboratory in which students are taught many important software MATLAB and LabVIEW. Students learn quality engineering principles to inexperienced graduate students in an accurately simulated industrial development environment. It resulted in the development of a framework for describing and evaluating such a real-world project, including evaluation of the notion of a user advocate in this laboratory students.

MATLAB SOFTWARE

Matlab programming is currently a widely established course for science and engineering specialty, different universities differ a lot in making the standard of this experimental course, however, the existing common problem is the weak disconnect between the contents and special training. To overcome the problem of disconnect between study and application of MATLAB, Schedule and contents of this course were discussed, and design experiment was enhanced. This revision takes not only into account for the connecting of contents but also fusion with corresponding frontier information field. Students enjoy the experiment, a preliminary understanding of the application situation of MATLAB programming language, and the educational quality can be improved.

LAB VIEW SOFTWARE

The graphical nature of LabVIEW makes it easier to develop working code faster. With LabVIEW, quickly drag and drop built-in functions to simplify acquisition, analysis, control, and data sharing so you can spend less time on syntax errors and more time on creating your application. LabVIEW easily connects to any device—be it hardware or outside applications like Microsoft Excel. You can depend on this seamless development experience as you write your program. From inexpensive medical devices to complex underwater autonomous vehicles, students are engineering a better world using LabVIEW. The NI education platform is designed to create engaging, authentic learning experiences that prepare students for the next generation of innovation. Cost-effective, scalable solutions offer academic institutions flexible integration across multiple science and engineering disciplines. The NI education platform combines the following:

Flexible hardware: Professional-grade measurement and control with real signals

Industry-standard software: Bridge theory, simulation, and experimentation

Relevant applications and courseware: Integrate tools across the curriculum

HARDWARE AVAILABLE-

Personal Computer (8GB RAM,1TB HDD) – 16 Nos.