- ***Offline Courses (During Ph.D., Course Instructor: Dr. Hardik J. Pandya)***

1. Design for Analog Circuits

   Topics taught: Basic Properties of OpAmp, Arithmetic Circuits with Op Amp, ADC, DAC, Clippers, and Clampers.

2. Process Technology and System Engineering for Advanced Microsensors and Devices

   Topics taught: Basics of Lithography, Optics in Lithography, Resolution, Depth of Focus and Resolution Enhancement Techniques, Laboratory demonstration on basics of Biopotential Acquisition, and ERP Experimentation.

- ***NPTEL Online Courses (During Ph.D., Course Instructor: Prof. Hardik J. Pandya)***

3. Introductory Neuroscience & Neuro-Instrumentation (Co-instructor: Dr. Mahesh Jayachandra)

   Topics taught: Basics of BCI Experimentation, Microstructures of Neural Engineering, EEGLAB/ERPLAB, Epilepsy: Introduction, and Seizure Classification.

4. Neural Science for Engineers Instrumentation (Co-instructor: Dr. Vikas V)

   Topics taught: Introduction and Applications of Event-Related Potentials, ERP Extraction Demonstration.

5. Mathematical Aspects of Biomedical Electronic System Design Instrumentation (Co-instructor: Prof. Chandramani Singh)

   Topics taught: Basics of Signal Types, Basics of Signal Acquisition, and Nyquist Rate

6. Advanced Neural Science for Engineers
   Topics taught: Lithography Basics, Fourier Optics, Role of Microfabrication in Neural Engineering, Basics of EEG/ERP Experiment Design, EEG/ERP Applications

- ***Offline Courses (During M.Tech.)***

7. Engineering Mathematics [Course Instructor: Dr. Sunitha V]

   Topics taught: Assignment and doubt-solving sessions on Calculus, Linear Algebra.

8. Design for Analog Circuits [Course Instructor: Dr. Rutu Parekh]

   Topics taught: Lab Experiments on Op Amp and rectifier experiments