EE 932 Speech Processing (3, 0)

Pre-requisite: None

Recommended Books:

1. Audio and Speech Processing with MATLAB, Paul Hill, Taylor & Francis Incorporated, 2018.
2. Language and Speech Processing, Joseph Mariani (Editor), John Wiley & Sons, Inc., 2013.
3. Multilingual Speech Processing, Tanja Schultz, Katrin Kirchhoff, Elsevier, 2006.

Credit Hours: *3*

Course Objectives:

- To understand the basic principles of speech perception.
- To understand basic principles of speech recognition, synthesis, and dialogue.
- To be able to generate speech datasets and build applications to recognize speeches and speakers.

Topics / Contents	Allocated Periods
The topics include physical and physiological acoustics, perception of speech, phonetics and phonology, signal processing, speech synthesis, prosody and emotions, hidden markov models, language modelling, human-computer communication, and dialogue systems. Other topics include linear-predictive model, cepstral analysis, speech coding, and parameterization of DTW.	**45**