**Course Schedule**

| Sr. No | Day/Date | Time | contents | Resource Person |
| --- | --- | --- | --- | --- |
| 1 | Saturday 09/09/2023 | 10:00 AM to 1:00 PM  (3 hrs) | Stages of NLP, Challenges and Issues(Open Problems) in NLP, Python fundamentals  Python libraries including HuggingFace for NLP tasks: overview and demonstrations | Rutuja Kulkarni  Urmila Pawar |
| 2 | Saturday 09/09/2023 | 02:00 PM to 05:00 PM  (3 hr) | Text preprocessing and Word Sense Disambiguation (WSD) | Dr. Haribhakt |
| 3 | Saturday 16/9/2023 | 10:00 AM to 1:00 PM  (3 hrs) | Hands-on: Word to vectors, Bag of words, TF IDF, NN based | Shriniwas Nayak |
| 4 | Saturday 16/9/2023 | 02:00 PM to 05:00 PM  (3 hr) | Ranking Models: Boolean, Vector Space, Basics of Probability and language model | Rutuja Kulkarni  Dr. Sheetal Sonawane |
| 5 | Sunday 17/9/2023 | 09:00 AM to 11:00 AM  (2 hrs) | Online Quiz |  |
| 6 | Saturday 23/9/2023 | 9:30 AM to 11:30 AM  12:00 PM to 2:00 PM  (4 hrs) | Basics NN, RNN, LSTM, Transformer model- BERT | Dr. Bhushan Garware |
| 7 | Sunday 24/9/2023 | 10:00 AM to 1:00 PM  (3 hrs) | Neural Network for language model - | Dr. Kulkarni Anagha |
| 8 | Saturday 30/9/2023 | 10:00 AM to 12: Noon  1:00 PM to 4:00 PM  (5 hrs) | Advanced BERT model: gpt, palm, llama, opt, mpt, bloom, falcon  Training techniques - MLM, NSP  Knowledge Distillation | Ved Patwardhan  Tanmay Chavan |
| 9 | Sunday 01/10/2023 | 09:00 AM to 11:00 AM  (2 hrs) | Online Quiz |  |
| 10 | Saturday 07/10/2023 | 10:00 AM to 12:00 PM  (2 hrs) | Advanced NLP models | Aditya Kane |
| 11 | Saturday 14/10/2023 | 9:30 AM to 11:30 AM  12:00 PM to 2:00 PM  (4 hrs) | NLP for low-resource languages: Overview case study, demonstration | Raviraj Joshi |
| 12 | Sunday 15/10/2023 | 10:00 AM to 12:00 PM  (2 hrs) | Information retrieval Application – Recommendation system overview – | Dr. Arati Deshpande |
| 13 | Saturday 21/10/2023 | (4 hrs) | NLP in production: challenges, opportunities and Constraints | Pratik Ratadiya |
| 14 | Sunday  22/10/2023 | (2 Hours) | Embedding and search with Generative AI | Ankit Patil |
| 15 | Saturday  28/10/2023 | (2 Hours) | Online Quiz |  |
| 16 | Monday 30/10/2023 | (4 hrs) 47 hrs | Project Implementation |  |

Course Coordinators: Mrs. Rutuja Kulkarni and Ms. U. S. Pawar