1. Fundamentals of GenAI (1.5 Hrs)
   1. Basis of AI and GenAI
   2. Discriminative AI and GenAI
   3. History of GenAI
   4. Gen AI models
   5. Limitations of GenAI and LLMs
   6. Prompt Engineering and GenAI Models
   7. Applications of the models
   8. LLMs
   9. Transformers and Finetuning methods
   10. NLP Fund., Word2Vec
2. GenAI Application Architecture (2 Hrs)
   1. Different ways to build GenAI Applications
      1. Prompt Engineering
      2. RAG System
      3. Fine Tuning
      4. When..? What..? Why..?
   2. GenAI Application Architecture (RAG)
   3. Important Frameworks
      1. OpenVINO
      2. Langchain
      3. LamaIndex (optional)
3. Foundation Model Deployment (2 Hrs)
   1. What is Foundation Model
   2. Importance of OpenVINO
   3. Model Conversion and Optimization
      1. Symmetric Quantization
      2. Asymmetric Quantization
   4. Different type of compute architecture (CPU, GPU & NPU)
   5. Run the LLM Locally
4. LLM with RAG System (3 Hrs)
   1. What is RAG
   2. Compents of RAG
      1. Embedding
      2. Indexing
      3. Query Inferencing
   3. Type of Data Infusing in RAG
      1. Database
      2. Document
      3. API
   4. Langchain and RAG System
5. End – End Project (2 Hrs)
   1. Introduction to OpenVINO Model Server and Hugging Face
   2. Overview of the Project & documentation
   3. Project Environment Setup in PC/AI PC
   4. Project Implementation
6. Bonus Topic: Advance GenAI (30 Mins)
   1. LLM Fine Tuning
      1. Full Parameter Fine Tuning
      2. Domain Specific Fine Tuning
      3. Task Specific Fine Tuning
   2. Requirements of LLM Fine Tuning

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| Activities | Tentative date | Remarks |
| Submission of first draft( in ppt format) for all the 6 Modules | 9th Aug | We are excepting almost all the modules draft to get ready except 1 or 2 |
| Review by Intel Unnati team & get the revised & updated one | 9th Aug |  |
| Handing over the first revised draft to IISc Review team by Unnati team by | 9th – 10th Aug |  |
| Review by IISc of the first revised draft for all the 6 Modules to get complete by | 16th Aug – 17th Aug | I have just assumed that they can complete reviewing 1 module per day. |
| Any correction to be done in the first draft of the slides based on the review comments of IISc team & getting the 2nd draft ready & handing over it to BU legal for review by | 20th Aug |  |
| Review by respective BU Legal teams of the 2nd draft for all the 6 Modules by | 23rd Aug | It involves Module 1 by Habana legal, Module 2 by NEX legal, Module 4, 5 by CCG legal, Module 2, 6 by SMG legal |
| Any correction to be done in the 2nd draft of the slides based on the review comments of BU legal & getting the 3rd draft ready & handing it over to SMG legal for final review by | 26th Aug |  |
| Review by SMG Legal of the 3rd draft for all the 6 Modules draft | 27th Aug | Since it will be already review draft from BU legal so SMG legal may not take much time to review this |
| Any correction to be done in the first draft of the slides based on the review comments of SMG legal team & getting the 4th draft ready & start of recording of the audio lectures by | 28th Aug |  |
| Completion of recording of all the audio lectures for all the 6 Modules by Intel BU Members | 31st Aug | All the presenters will be giving half of their worktime for recording purpose in the last week of Aug. At least 2- 3 topics of each Module will be getting recorded with each topic having max 30 min. content. |
| Handing over the audio lectures to Studio 33 by Unnati team by | 1st Sept |  |
| Studio 55 to come out with the first ready version of the audio lectures with voiceover | 20th Sept | Though in Proposal Studio 33 mentioned 45 days for final out to get ready from the day of receiving the raw files but can be expedited. |
| Review by Intel Unnati team on the first ready version of the audio lectures with voiceover & get necessary editing & correction done by | 23rd Sept |  |
| Gen AI Course to get live by | 25th Sept – 1st Oct | Assuming 2-3 days for final production |
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