

**Course Instructor: Dr Chiranjib Sur**

**Course Webpage:** <https://chiranjibsuruf.github.io/courses/da627.html>

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**Objectives:**

**Prerequisites:**

**Course Code: DA627**

**Course Name: Building Multimodal GenAI**

**Credits: 3-0-0-6**

**Syllabus:** Introduction to Gen AI: LLma, GPT, Gemini, Mistral, Camel, Qwen, datasets, platforms; Text generation: training, quantification, domain adaptation, fine-tuning; Image and video generation: usage; Multimodal Gen AI: digital transformation, business opportunities; Gen AI for audio and voice: fine-tuning, deep fake; Gen AI for simulation, logistics, forecasting, disentanglement, academic integrity, education and multi-objective optimization, biology; Dynamics of reinforcement learning and data search in Generative AI;

**Textbooks:**

- Will be updated soon.

**References:**

- Will be updated soon.