

# Building Software Systems

Lecture 0

## **Course Information**

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# What is this course about?

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In a nutshell, it is about building “software-intensive” solutions for some end-user

- The term “software-intensive” means that while we will talk mostly about software solutions ...
- ... the overall solutions may involve thinking beyond software, e.g., ...
- ... building specialised hardware components, and introducing process changes

This is a “breadth-heavy” course

- Instead of drilling too deep in one particular area, the course will scratch the surface of multiple domains
- The idea is to open your mind towards building software solutions
- We will, thus, cover a large number of topics in this course, albeit, only in brief

There are *no Textbooks* for the Course (despite the what you see in the Course Catalogue)

- There are some Reference Books (all texts mentioned in the Course Catalogue are actually for reference only)
- We will “heavily” use sources from the internet in this course
- For instance, articles on [medium.com](https://medium.com), posts on [StackOverflow.com](https://stackoverflow.com), and above all – ChatGPT !!

# Is this course for you?

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I am not sure how you got this course

- (actually, being a person associated with MIS, I can take an informed guess, but I will assume innocence here :P)
- But this is just an opening day comment – it will be a heavy course !!
- **You need a good background in basic Computer Science to fully benefit from this course**
- Also, if you are not adept to using Linux, you may face significant challenges during the course

Most of the time, we will have live, technical sessions

- If the size of the classroom permits, I encourage you to bring your laptops (and use your Mobile Hotspots)
- I will try my best (cannot promise) to record the such sessions and share with you

For rest of the lectures, I will be sharing slides with you

- We will use Moodle for that purpose, once it is setup
- In the beginning, I may use Google Drive to share the documents

# Lecture Schedule, Venue and TAs

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## Lecture Schedule

- Monday: 5 to 5:50 PM
- Tuesday: 3 to 3:50 PM
- Thursday: 5 to 5:50 PM

Venue: NLHC G12

## Teaching Assistants:

- Partho Barui (Email: [22MT0260@iitism.ac.in](mailto:22MT0260@iitism.ac.in))
- Sahil Dhanvij (Email: [22MT0344@iitism.ac.in](mailto:22MT0344@iitism.ac.in))

# Evaluation Details

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## Mid-semester Exam

- Weightage in evaluation: **28%**

## End-semester Exam

- Weightage in evaluation: **42%**

## Term Project

- Weightage in evaluation: **30%**
- Teams of **up to four students** will work on **one Project** (I will form the groups)
- You will have to submit **three documents** and **appear in one Presentation**
- Documents to be submitted:
  - Proposal** – Providing a One-page synopsis of the proposed work
  - Mid-term Report** – Discussing the work till Mid-semester exams (typically 3-5 pages)
  - Final Report** – Detailing the work done as part of the project (typically 15-20 pages)
- Final Presentation:
  - Each team will get 10+5+5 minutes of time (**10 minutes – presentation, 5 minutes – demo, 5 minutes – Q&A**)