Next-Gen Computer Architecture
An online certificate course offered by the Department of CSE, IIT Hyderabad and sponsored by Intel.
Starting from February 2025

Interested to know how a software executes on a processor? Want to know the internal design of a processor? Interested in pursuing an industry or research career in processor design?

We are offering a certificate course (in online mode) on **Computer Architecture**, primarily sponsored by **Intel** with a very nominal fee from participants. This course is designed to introduce the basic concepts of computer architecture with practical exercises and prepare you for pursuing a career in the Computer Architecture field.

Why enroll in this course?

❖ In this course, Computer Architecture will be taught with practical examples and exercises. A participant will gain the following benefits from this course:
- ✓ Preparation for internships/jobs in various processor/semiconductor design companies like Intel.
- ✓ Exposure to recent research aspects and motivation for higher studies in this domain. The course will provide a starting point for research in Computer Architecture. We will mentor the top performing and motivated participants to do further research after completing the course.
- ✓ Conceptual understanding for national examinations like GATE.

❖ Live teaching and doubt clearing sessions unlike pre-recorded online courses.
❖ The top performers can attend a partially-funded one-week offline workshop at IITH and could be considered for internships at IITH in this field.
❖ The course exposes participants to several tools and simulators to experiment with processors and memories.

❖ A certificate will be issued to all the participants scoring more than the passing marks during the assessment process.

Who can enroll?

❖ **[Students]** - Any student who has a basic knowledge of C/C++ and data structures can enroll for this course. The course will be beneficial for both UG and PG students.
❖ **[Faculty]** - Any faculty member who wants to develop his/her skills on Computer Architecture for academic purposes or who is searching for a starting point to do further research in this domain.
❖ **[Industry people/Freelancers]** - Any Industry person (or anyone) who wants to gather more practical knowledge or refresh their basic concepts about Computer Architecture.

How to enroll?

To enroll for this course, you need to follow these steps:
❖ **[Fee payment]** - The course is primarily sponsored by **Intel** and we are charging a very nominal fee from participants.
- ✓ The fee is 1500/- for students, 2000/- for faculty members, and 5000/- for industry/others.
- ✓ For women participants, the registration fee is 20% lower (1200/- for students, 1600/- for faculty members, and 4000/- for industry/others).
- ✓ All fee payments will attract an 18% GST
- ✓ For payment scan the payment QR code. Make sure before payment that the payment link is: https://payments.billdesk.com/bdcollect/bd/iitof/16314
❖ **[Registration form]** – Please click here for final registration or scan the registration QR code.

Payment ➡

Registration ⬅

Teaching Plans

❖ The classes will be online in late evening (6 pm-7.30 pm). Two classes of 1.5 hours per week.
❖ Tutorial classes will also be conducted on a regular basis to give a demo of various simulation tools and to clear doubts.
❖ A portal will be created for posting your queries related to the course anytime.

Important Dates

- • 17-Feb-2025 (registration ends)
- • 28-Feb-2025 (classes start, tentative)
- • 24-May-2025 (Final exam, tentative)
- • 10-July-2025 (Offline workshop at IITH, tentative)

Course Coordinators

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More Details

❖ **For more details about the course please visit the link or scan the QR code.**

https://people.iith.ac.in/rkedia/NextGenCA2025.pdf