Core Foundation

Maintain a CGPA of 8.5 or above to target FAANG companies, falling below this threshold may prevent your resume from passing the initial machine-based screening round.

1. Programming Fundamentals

Choose Your Language: Start with either C++ or Java and master the fundamentals before moving forward.

2. Data Structures & Algorithms (DSA)

Recommended Learning Path:

- **Step 1:** Progress to comprehensive DSA concepts
 - o Striver's DSA Playlist
 - o Striver DSA Sheet
- Step 2: Complete Design and Analysis of Algorithms (DAA)
 - DAA Playlist

Essential Platform

- **Primary Learning Hub:** <u>TakeUForward</u> Your go-to resource for comprehensive coding tutorials
- Roadmap: Roadmap Website

3. Advanced Concepts

Dynamic Programming Mastery:

DP Playlist

Technical Core Subjects

4. Essential CS Fundamentals

- Database Management Systems (DBMS): DBMS Playlist
- Computer Networks: CN Playlist
- Operating System:
 - o OS Playlist

- System Design:
 - o System Design Basics
 - o Advanced System Design

Academic Excellence

5. Semester-Specific Subjects

• Cryptography: Cryptography Playlist

• Theory of Computation: <u>TOC Playlist</u>

• Compiler Design: Compiler Design Playlist

Quick Revision Resources:

- DBMS One-Shot
- Computer Networks One-Shot
- Operating Systems One-Shot

Practical Skills Development

6. Web Development Stack

Frontend Development:

• JavaScript Mastery Channel - HTML, CSS, React, Next.js, and Projects

JavaScript Fundamentals:

- JavaScript Course 1
- JavaScript Course 2

Exclusive Student Benefits

7. Free Resources & Tools

Use your college email (@gehu.ac.in) to access:

- GitHub Student Developer Pack
- Google Cloud for Students

- Microsoft Azure for Students
- AWS Educate

How to Start

- 1. Choose your programming language and start practicing
- 2. Begin with DSA concepts before moving to DAA and then advanced DSA
- 3. Dedicate specific time slots for core subjects
- 4. Set up your free student accounts for cloud platforms
- 5. Create a consistent study schedule

"Success in placements comes from consistent effort, not last-minute preparation. Start today, stay committed, and results will follow."