

Must-Have Skills to Crack Campus Placements

Organized by Core Concepts, Programming, Development, Tools, and Soft Skills.

Core Computer Science Subjects (Always Asked)

- **Data Structures & Algorithms (DSA)**
 - Arrays, Strings, Linked Lists, Stacks, Queues, Trees, Graphs
 - Sorting, Searching, Recursion, Dynamic Programming
- **Object-Oriented Programming (OOPs)**
 - Encapsulation, Inheritance, Polymorphism, Abstraction
 - Language: C++ / Java / Python
- **Operating Systems (OS)**
 - Processes, Threads, CPU Scheduling, Deadlocks
- **DBMS (Database Management System)**
 - SQL (SELECT, JOIN, GROUP BY), Normalization, Transactions
- **Computer Networks**
 - OSI Model, TCP/IP, IP Addressing, Protocols (HTTP, FTP)

Programming & Problem Solving

- **Strong in One Language:** C++, Java, or Python
- **Competitive Coding:** LeetCode, GFG, CodeStudio (200+ problems)

Development Skills (Build Real Projects)

Pick one domain and complete 2-3 projects:

Domain	Technologies
Web Dev	HTML, CSS, JS, React, Node, MongoDB
App Dev	Java/Kotlin, Flutter
AI/ML	Python, NumPy, Pandas, scikit-learn
Data Science	Python, SQL, Matplotlib, PowerBI
Cybersecurity	Kali, Networking, Burp Suite
DevOps	Git, Docker, Jenkins, AWS Basics

- ◆ Host projects on GitHub + Create a Portfolio Website

▣ Tools & Industry Tech

- **Git & GitHub**
- **VS Code / IntelliJ**
- **Postman (API testing)**
- **Docker (Basics)**
- **Cloud Platforms:** AWS / Azure / GCP (Basics)

▣ Soft Skills & Prep Essentials

- **Aptitude & Logical Reasoning:** IndiaBix, PrepInsta
- **Communication Skills:** Resume pitch, Interviews, GDs
- **Resume Building:** One-page, ATS-friendly
- **Mock Interviews:** Pramp, InterviewBuddy

✓ Bonus Certifications (Optional)

- Google Data Analytics (Coursera)
- AWS Cloud Practitioner
- Python for Everybody (University of Michigan)
- Meta Frontend Developer (Coursera)

🔰 Final 6-Step Roadmap to Get Placed

1. Master DSA → Practice on LeetCode / GFG
2. Learn Core CS Subjects → OS, DBMS, CN
3. Pick Dev Domain → Build & Host 2+ Projects
4. Resume + GitHub → Add to LinkedIn

5. Practice Aptitude + HR Questions
6. Apply for Campus & Off-Campus Jobs

Share this with all your CSE juniors & friends to help them get placed successfully!