

# Complete Guide to HackWithInfy 2025 *(Updated June 2025)*

## Introduction

**HackWithInfy** is Infosys’ premier coding competition for engineering students in India. It offers **pre-placement interviews (PPIs)** for technical roles with competitive compensation. The contest evaluates:

- **Round 1:** Algorithmic problem-solving (3 hours)
- **Round 2:** Innovation hackathon (48 hours)

### Roles & Compensation

| Role                       | CTC (LPA) | Key Selection Criteria                       |
|----------------------------|-----------|--|
| System Engineer (SE)       | ₹3.5      | Arrays, sorting, basic recursion             |
| Digital Specialist (DSP)   | ₹6.2      | DP, graphs, backtracking                     |
| Specialist Programmer (SP) | ₹9.5      | Segment trees, game theory, CP-level mastery |

## Competition Structure

### Round 1: Online Coding (3 Hours)([Click Here for more details](#))

- **Format:** 3 problems (Easy/Medium/Hard)
- **Qualification:**
  - SE: Solve  $\geq 1$  problem
  - DSP: Solve  $\geq 2$  problems (including 1 medium)
  - SP: Solve all optimally
- **Key Topics:**
  - [Arrays/Strings](#)
  - [Dynamic Programming](#)
  - [Advanced Trees](#)

### Round 2: Grand Finale (48-Hour Hackathon) )([Click Here for more details](#))

- **Deliverables:** Prototype + pitch deck + demo video
- **Winning Tech Stacks:**

| Domain | Tools                                |
|--------|--------------------------------------|
| Web    | MERN (MongoDB, Express, React, Node) |
| AI/ML  | TensorFlow + Scikit-learn            |
| Cloud  | AWS/Azure deployment                 |

- **Judging Criteria:** Innovation (40%), scalability (30%), UI/UX (30%)

## DSA Syllabus & Resources (Link)

### 1. System Engineer (SE)

- **Topics:** Binary search, BFS/DFS, basic recursion
- **Resources:**
  - [GeeksforGeeks SE Guide](#)
  - [LeetCode Easy Problems](#)

### 2. Digital Specialist (DSP)

- **Topics:** 0/1 Knapsack, Dijkstra's, Trie
- **Resources:**
  - [Striver's DSP DSA Sheet](#)
  - [HackerRank Graphs](#)

### 3. Specialist Programmer (SP)

- **Topics:** HLD, XOR tricks, matrix exponentiation
- **Resources:**
  - [CodeForces 1500+ Problems](#)
  - [CP-Algorithms Advanced Guide](#)
  - [HackerRank](#)

## Preparation Strategy

### Phase 1: Foundation (1<sup>st</sup> Week)

- **Daily Routine:**

Morning (2 hrs): Topic study (e.g., DP)  
Afternoon (2 hrs): Solve 10 problems (LeetCode/CodeChef)  
Evening (1 hr): Analyze failed solutions
- **Tools:** [Visualgo](#) for algorithm visualization

### Phase 2: Contest Simulation (2<sup>nd</sup> Week)

- **Weekly Plan:**

| Day     | Activity                            |
|---------|-------------------------------------|
| Mon-Wed | Topic drills (e.g., graphs only)    |
| Thu-Fri | 3-hour mock tests                   |
| Sat     | Live contests (CodeForces/LeetCode) |

### Phase 3: Hackathon Readiness

- **Key Steps:**
  1. Master 1 full-stack framework (e.g., [React](#))
  2. Build 2 projects using APIs (e.g., [Google Maps API](#))
  3. Deploy on [AWS](#)

## Top 10 Must-Solve Problems

1. Arrays: [Max Subarray Sum](#)
2. DP: [0/1 Knapsack](#)
3. Graphs: [Dijkstra's Shortest Path](#)
4. Trees: [LCA in Binary Tree](#)
5. Bit Manipulation: [Single Number II](#)
6. Backtracking: [N-Queens](#)
7. Hashing: [Group Anagrams](#)
8. Greedy: [Coin Change](#)
9. Trie: [Word Search II](#)
10. Segment Trees: [Range Sum Query](#)

## Hackathon Toolkit

| Category   | Tools  |
|------------|--|
| Frontend   | React, Angular, Tailwind CSS                         |
| Backend    | Node.js, Django, Flask                               |
| Database   | MongoDB, Firebase                                    |
| Deployment | AWS EC2, Vercel, Netlify                             |
| APIs       | <a href="#">OpenWeather</a> , <a href="#">Twilio</a> |

## Project Ideas:

- AI-based crop disease detector (IoT + ML)
- Blockchain voting system
- Mental health chatbot (NLP)

## Verified Resources

### Practice Platforms

- [LeetCode \(Infosys Tag\)](#)
- [Hackerrank](#)
- [GeeksforGeeks DSA](#)

### Previous Year Papers

- [2023 Questions](#)
- [2022 Solutions](#)

## Video Tutorials

- [DSA Mastery](#)
- [MERN Stack](#)
- [AWS Deployment](#)

## Community Support

- **Discussion Forums:**
  - [Infosys Careers Forum](#)
  - [LeetCode Discuss](#)
- **Q&A:** [Stack Overflow Infosys Tag](#)
- **Study Groups:** [Discord Server](#)

## Preparation Timeline(For Very Beginner)

| Timeframe    | Activity                                     |
|--------------|--|
| Months 1-2   | Complete <a href="#">Striver's SDE Sheet</a> |
| Month 3      | Solve <a href="#">CodeForces Contests</a>    |
| Last 2 Weeks | Build hackathon prototype                    |

## Final Checklist

1. **Before Round 1:**
  - Solve all [2023 questions](#)
  - Achieve LeetCode rating  $\geq 1600$  (for SP)
2. **Before Hackathon:**
  - Prepare cloud deployment scripts
  - Draft problem statement with societal impact
3. **During Hackathon:**
  - Prioritize working demo over extra features
  - Document code with comments

**Pro Tip:** For SP roles, maintain a **CodeForces rating  $\geq 1600$** . Track progress [here](#).

[https://img.shields.io/badge/DAYS\\_LEFT-120-green?style=flat-square](https://img.shields.io/badge/DAYS_LEFT-120-green?style=flat-square)

## Need Help?

- Email: [hackwithinfy.support@infosys.com](mailto:hackwithinfy.support@infosys.com)
- Live Chat: [Infosys Careers Portal](#)