

# COMPUTER HARDWARE ENGINEER

Computer Hardware Engineers help to accelerate new computer technology by creating advancements in computer hardware. In order to do this, they research, design, develop, and test computer systems and their components.

## PERSONAL COMPETENCIES



- You are good with computers
- You like to analyse problems/situations
- You pay attention to details while working
- You are comfortable with working in a team



The approx. course fee ranges between **INR 45,000 - 10,00,000\***

*\*These figures are estimated numbers and will vary from Institute to Institute.*

## SCHOLARSHIPS

- Engineering specific scholarships - You can opt for engineering-specific scholarships such as IndusInd Foundation Scholarship, Baba Gurbachan Singh Scholarship Scheme, Samsung Star Scholar Programme 2022, Central Sector Scheme Of Scholarships, JSPN Scholarship 2022 and so on\*
- National Scholarship Portal - Please visit [www.scholarships.gov.in](http://www.scholarships.gov.in) Under this portal there are Central Government schemes, UGC/AICTE Schemes and Assam Government Schemes offered by different departments\*
- Please visit [www.buddy4study.com](http://www.buddy4study.com) for details on available scholarships. This is a gateway to scholarships starting from Class XI\*
- Scholarships are also available in the Institutes based on merit\*

*\*(Availability of these scholarships can vary from time to time)*

## LOANS

- VidyaLakshmi, [www.vidyalakshmi.co.in](http://www.vidyalakshmi.co.in), is a portal for students seeking education loan. This portal has been developed under the guidance of the Department of Financial Services, (Ministry of Finance), Department of Higher Education (Ministry of Human Resource Development) and Indian Banks Association (IBA). Students can view, apply and track the education loan applications on the website.
- Some states have student credit cards with low interest rates, for instance, West Bengal, Odisha, Bihar, etc.
- All banks give education loans.



## ENTRY PATHWAY

1. Complete 10+2 in the Science stream (Physics, Chemistry and Mathematics)
2. Complete a Bachelor's degree (B.Tech/B.Sc./BCA) in Computer Science/Electrical or electronics engineering OR Complete a Bachelor's degree followed by a Master's degree (M.Tech/M.Sc./MCA) in the same field OR Complete a PG Diploma in Computer Hardware and Networking

*Please check the duration of the course during enrolment*



## EXPECTED INCOME

*\*The figures are indicative & subject to change*

The approx. salary of a Computer Hardware Engineer ranges between **INR 13,100 - 1,67,000\*** per month

Source: [https://www.payscale.com/research/IN/Job=Hardware\\_Engineer/Salary](https://www.payscale.com/research/IN/Job=Hardware_Engineer/Salary)

## WHERE WILL YOU WORK

**Places of Work:** You can work in the Manufacturing sector creating electronic components and products, in Computer systems, design services, IT and web-hosting companies and so on.

**Work Environment:** The work timings are typically 5 to 6 days a week for 8 to 9 hours per day. Shift system is applicable.

**Entrepreneurship:** You can pursue freelancing in this field

*Opportunities for work exist for differently abled in this field.*

## EXPECTED GROWTH PATH

Hardware Engineer → Validation Engineer → Senior Hardware Design Engineer

## WHERE WILL YOU STUDY?

The course is offered by the Department of Computer Science. This list of Institutes is indicative only

### GOVERNMENT INSTITUTES

1. IIT Guwahati
2. Tezpur University, Tezpur
3. Assam University, Silchar
4. NIT Silchar
5. NIT Agartala
6. NIT Manipur
7. NIT Arunachal Pradesh
8. CIT Kokrajhar
9. NIT Shillong

### PRIVATE INSTITUTES

(Please check if Institute is affiliated and accredited with UGC and AICTE before applying)

1. Assam Professional Academy, Guwahati
2. AD Patel Institute of Technology, Gujarat
3. All India Institute of Management Studies, Chennai
4. Regional Institute of Science and Technology, Guwahati
5. Acharya Prafulla Chandra College, Kolkata
6. Bangalore City College, Bangalore
7. Bapatla Engineering College, Andhra Pradesh
8. Bonnie Foi College, Bhopal

Information on Institute rankings is available at - <https://www.ni.html>

### DISTANCE LEARNING INSTITUTE

Indira Gandhi National Open University (IGNOU), New Delhi

### ONLINE COURSES

- NPTEL\* Swayam - <https://archive.nptel.ac.in/courses/106/105/106105194/>
- Udemy - <https://www.udemy.com/topic/computer-hardware/>

*\*NPTEL - National Programme in Technology Enhanced Learning. It is by the Government of India and offers a variety of courses in an audio-video form*

## EXAMPLE FROM THE FIELD

**Meenakshi Chatterjee** is a Hardware Engineer at Apple. She is a systems integrator and PCB designer. Earlier, she used to work with Twitter. She holds a Bachelor's degree in Electrical and Electronics and a Master's in Physics from Birla Institute Of Technology and Science (BITS), Pilani and has finished her Masters in Electrical Engineering from University of California, Los Angeles (UCLA).\*

Source: <https://feminisminindia.com/2017/05/16/top-women-engineers-india/>

*\*The above information is for training purposes only and will not be used for any commercial gains*

Search keywords...



*computer hardware engineer, computer hardware designer, validation engineer*