

ENGINEERING PHYSICIST

Engineering Physicists work to combine Engineering, Physics, and Math in an effort to bridge the gap between theoretical science and practical engineering. They use scientific and engineering principles to solve problems and develop new processes, products and technologies.

PERSONAL COMPETENCIES

- You are creative
- You like solving problems
- You enjoy to figure out how things work
- You love Maths and Science



SCHOLARSHIPS

- Merit-cum-Means based Scholarship - About 20,000 such engineering scholarships are awarded by the Ministry of Minority Affairs every year. The full course fees of awardees is directly paid to their institutions under this scheme.*
 - Indian Oil Educational Scholarship- The IOC Ltd offers 300 scholarships every year to eligible students. Students need to be enrolled in an undergraduate course. The scholarship particularly focuses on students with physical disabilities, women and students from North East and J&K.*
 - "Ishan Uday" Special Scholarship Scheme - For promoting higher education and for encouraging children belonging to economically weaker section of the NE region, the UGC has launched "Ishan Uday" Special Scholarship Scheme for North Eastern Region students.
 - Visit www.scholarships.gov.in the National Scholarship Portal. Under this portal there are other central government schemes offered by different departments, UGC/AICTE Schemes and State Schemes.*
 - Visit www.buddy4study.com a gateway to scholarships starting from Class XI.*
 - Scholarships are also available in institutes based on merit.*
- *(Availability of these scholarships vary from time to time)

LOANS

- VidyaLakshmi, 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.



The approx. course fee ranges between **INR 2.50,000- 5,00,000*** per annum

*(The above mentioned figures are approximate numbers. This will vary from Institute to Institute)

ENTRY PATHWAY

1. Complete 10+2 in Science stream (Physics, Chemistry and Mathematics)
2. Complete Bachelor's degree (B.Tech/B.E./B.Sc) in Mathematics/Chemistry/Physics

OR

Complete Bachelor's degree (B.Tech/B.E./B.Sc) in Mathematics/Chemistry/Physics, followed by a Master's degree in the same field.

For admissions, you must qualify entrance examination conducted at national level (JEE Main, JEE Advanced etc.) or state level (WBJEE, AP EAMCET etc.) or institute level (VET, IP etc.)

Please check the duration of the course during enrolment



EXPECTED INCOME

**The figures are indicative & subject to change*

The approx. salary of an Engineering Physicist ranges between **INR 16,333 - 250,000*** per month.

Source: [https://www.payscale.com/research/IN/Degree=Bachelor_of_Technology_\(BT_%2F_BTech\)%2C_Engineering_Physics/S](https://www.payscale.com/research/IN/Degree=Bachelor_of_Technology_(BT_%2F_BTech)%2C_Engineering_Physics/S)

WHERE WILL YOU WORK

Places of Work: R&D, Manufacturing, High tech industries like Telecommunication, Nuclear power, and Aerospace, Automotive, Defence, Energy, IT, Computing, Universities and other research and development facilities are some of the popular sectors to work in.

Work Environment: As an Engineering Physicist, you will mostly work in offices, research laboratories and universities. You will work full time, and at times, may work more than 40 hours per week.

Opportunities for differently abled exist in this field

EXPECTED GROWTH PATH



Industrial Engineer → Manufacturing Engineer → Production Supervisor → Plant Manager → Head of Manufacturing

WHERE WILL YOU STUDY?

The course is offered by the Department of Engineering/Physics. This list of institutes is indicative only

GOVERNMENT INSTITUTES

1. Delhi Technological University
2. IIT Bombay
3. IIT Delhi
4. IIT Guwahati
5. IIT Madras
6. NIT Calicut
7. IIST Thiruvananthapuram
8. IIT BHU

PRIVATE INSTITUTES

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

1. Chandigarh University
2. Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram
3. VVCE Mysore - Vidyavardhaka College of Engineering
4. Bennett University, Greater Noida
5. RKDF University, Bhopal, Madhya Pradesh

Information on the institute rankings can be found at - www.nirfindia.org/2022/Ranking.html

ONLINE COURSES

Udemy - <https://www.udemy.com/course/engineering-physics-sppu-2019/>

Search keywords...



engineering physicist, physicist, assistant professor



EXAMPLE FROM THE FIELD



Venkatraman Radhakrishnan was a Space Scientist and member of the Royal Swedish Academy of Sciences. He was Professor Emeritus of the Raman Research Institute in Bangalore, India, where he had been Director from 1972 to 1994. He graduated from Mysore University before joining the Department of Physics at the prestigious Indian Institute of Science, Bangalore.*

Source: <https://theprint.in/theprint-profile/n-radhakrishnan-scientist-sailor-who-broke-the-rough-the-shadow-of-nobel-kin/236538/>

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