

Teaching Fellow Positions in Physics

Applications are invited for four Teaching Fellow (TF) positions for Physics courses and for a Foundation course (FC) on Principles of Science (PoS) to be taught at Ashoka University in the Monsoon 2021 semester (August - December 2021). **Applicants are required to have a master's degree in physics by the time they join as TF.** Competence in the methods of theoretical, experimental, and computational physics is expected.

The physics courses are of two types – theory and lab – and form part of the curriculum leading to a major in physics. The theory courses are canonical undergraduate physics courses: mathematical and computational physics, waves & optics, quantum mechanics, thermodynamics, statistical physics, properties of matter. The labs are somewhat different from standard undergraduate labs in Indian universities, but at the same level. The number of students in a typical lab or class is less than twenty-five, while a foundation course class has a maximum of 100 students.

A theory course has two 90-minute classes and one 90-minute discussion session per week, besides office hours. A lab has one three-hour session and another three hours of extra work time per week. Each course has one faculty instructor, aided by two TFs in a lab, and by one TF in a theory course. Each TF is attached to one lab and one theory course, or to two theory courses.

The duties of a TF in a lab course include making hand-outs, preparing experiments, supervising students, and grading lab reports. The duties in a theory course include attending classes, grading homework assignments and tests, and leading weekly discussion sessions (intended to improve problem-solving skills). In addition, a TF is expected to hold office hours so that students with difficulties may consult them. The total number of working hours in a week is about fifteen, usually spread over four days.

Foundation courses at Ashoka University form an essential part of its broad-based liberal arts programme. They are taken by students of all backgrounds and majoring in all disciplines. There are two 90-minute lectures per week given by a professor. The class is divided into six groups of 15-20 students, three led by one of the two TFs assigned to the class. Each group has one 60-minute discussion session (DS) per week.

The appointment will be for one semester (Monsoon 2021) initially but subject to satisfactory performance could be extended for the following semester also. The remuneration offered by Ashoka University is generous. Ashoka helps TFs find accommodation in or near the university campus. **Interested applicants should write to the following e-mail address: physics.dept@ashoka.edu.in with a CV containing details of their educational qualifications, on or before July 15, 2021. Shortlisted candidates would be called for an online interview around late July 2021.**