

Proposal for Lateral Entry of students to the bachelor programs in Physics, Chemistry and Mathematics

Recently, a few changes have been proposed in the Joint Entrance Examinations by Prof. Ashok Mishra Committee. An email was sent by the Director's Office soliciting comments and suggestions on the same. We propose that as a part of these new changes, a lateral entry provision (admission through routes other than JEE) for admission into the basic sciences program should be looked at. The motivation behind the proposal is given below and a few suggested clauses for the same are outlined thereafter.

Motivation:

- It is observed that these departments are less preferred to most engineering departments across general, SC, ST and OBC-NCL categories (with the exceptions of BSBE and Material Science and Engineering in the general category). This can be observed from the closing ranks for each of these categories. The exception to this is the Mathematics and Scientific Computing Program whose closing ranks are competitive with a few engineering departments.
- The most lucrative career path for students in the basic sciences immediately after their bachelor program is higher studies as job opportunities are very limited. This implies that students who are certain of their commitment towards the department and are interested in a higher education are the kind of students who would benefit most from the opportunities provided by these programs. Students looking for job opportunities immediately after the bachelor program are therefore forced to take up jobs in areas that are not directly related to the department.
- There is a lack of interest observed in JEE applicants with respect to these departments as is evident from the fact that a sizeable number of seats remain vacant during JEE counselling and also the fact that a large number of students who are admitted into these departments branch out resulting in considerable vacancies as compared to other engineering programs.

Proposed changes:

We propose that admission into the Mathematics, Physics and Chemistry programs could be granted in the following manner. Similar models have been successfully implemented by Indian Institute of Science, Bangalore.

- 50% of the seats be allotted to JEE candidates with the extant laws for reservation of seats as mandated by the Government of India.
- 50% of the seats can be allotted to candidates who have cleared either KVPY or Indian National Olympiads (administered by HBCSE) on the following basis:
 - **KVPY**: Students who have cleared either stream SA or stream SX of the KVPY examinations can be offered admissions
 - **INO**: Students selected for the Orientation-cum-Selection Camps of the INO in Mathematics, Physics or Chemistry can be offered admission into the respective departments.
 - In both KVPY and INO streams of admission, reservation of seats as mandated by the Government of India will hold. KVPY also publishes category based rank lists.

The break up of seats in JEE, KVPY and INO is a suggestion. Each department can deliberate upon the relative weights to be assigned to each stream.