# Student Survey Report

In this brief report, we analyze the data gathered from a survey conducted by the ARC among the undergraduates of IIT, Kanpur. The survey was taken by 554 students from Y3 to Y8 spread across twelve departments. In the following, we present each question from the survey and analyze the corresponding response.

The first question was on the preference about the department and the program. The purpose of this question was to gain insight into the popularity of departments and programs among the students. The question is presented below.

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If you had full freedom to select any program you wanted, which program
would you select today? Please give 2 Preferences. If you had full freedom
to select any program you wanted, which program would you select today?
Please give 2 Preferences.

The department choices were AE, BSBE, CE, CHE, CHM, CSE, ECO, EE, MATH, ME,
MME, and PHY. The program choices were BTech, Dual (BTech/MTech), Int. MSc.
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(a)   (b)
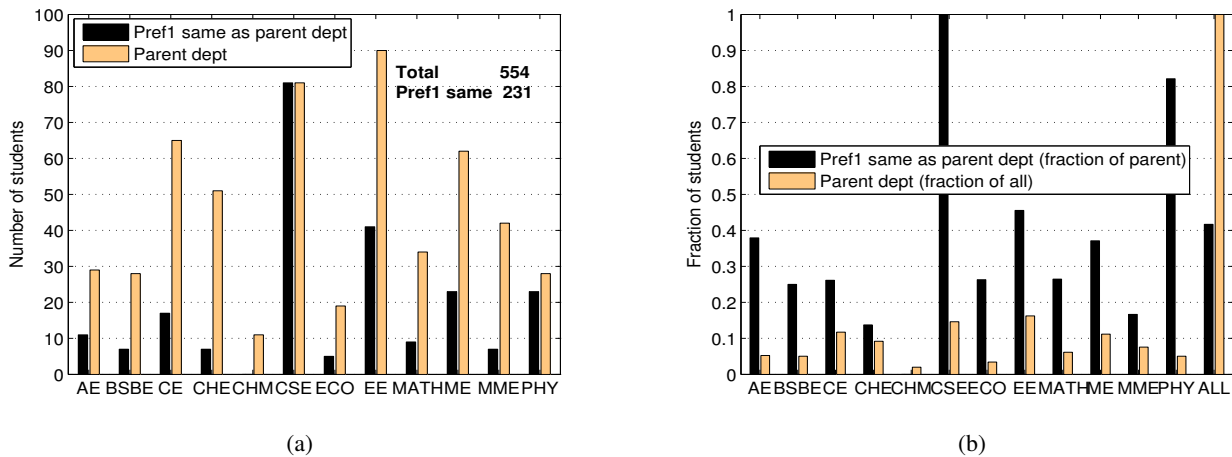
Figure 1. (a) Number of students choosing their parent departments as the most preferred departments. (b) Same data as percentage.

Figure 1(a) shows two pieces of information. For each department, the right bar presents the number of students participated in the survey from a particular department and the left bar shows how many of them chose their department as the most preferred department. Figure 1(b) shows the same data as percentages, e.g., the right bar is presented as the percentage of all students taking the survey and the left bar is the percentage of students taking the survey within a particular department. While all students of CSE chose their department as the most preferred

department, over 80% of PHY students did so. EE, ME, and EE were the others among top five with more or less 40% of their students choosing them as the first preference. Overall, slightly over 40% of students chose their parent department as the most preferred department.

(a)

(b)
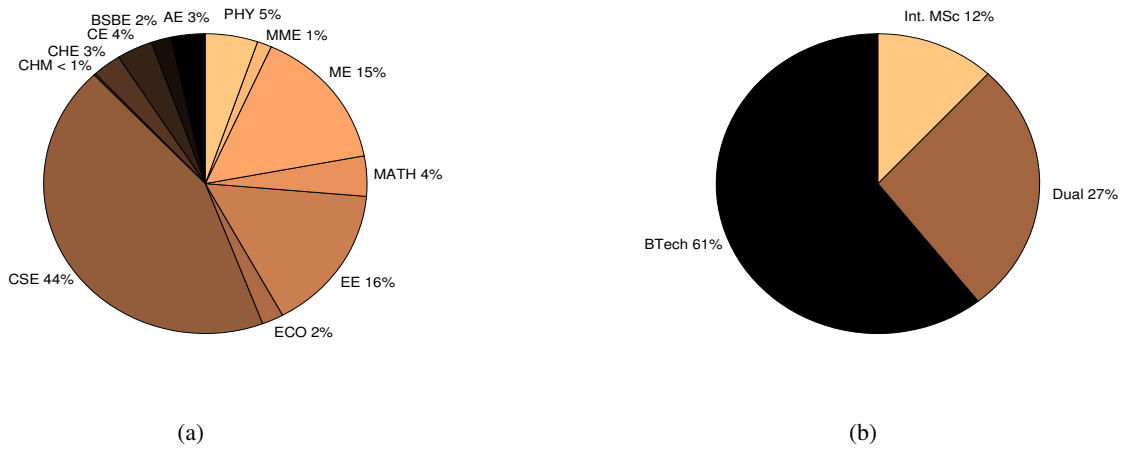
Figure 2. Percent vote for (a) each department and (b) each program as the first preference.

Figure 2(a) shows the percentage of students choosing various departments as their first preferences. Similar data related to various programs is shown in Figure 2(b). The top three departments by first preference are CSE, EE, and ME, while BTech, by far, turns to be the most preferred degree program.


(a)

(b)
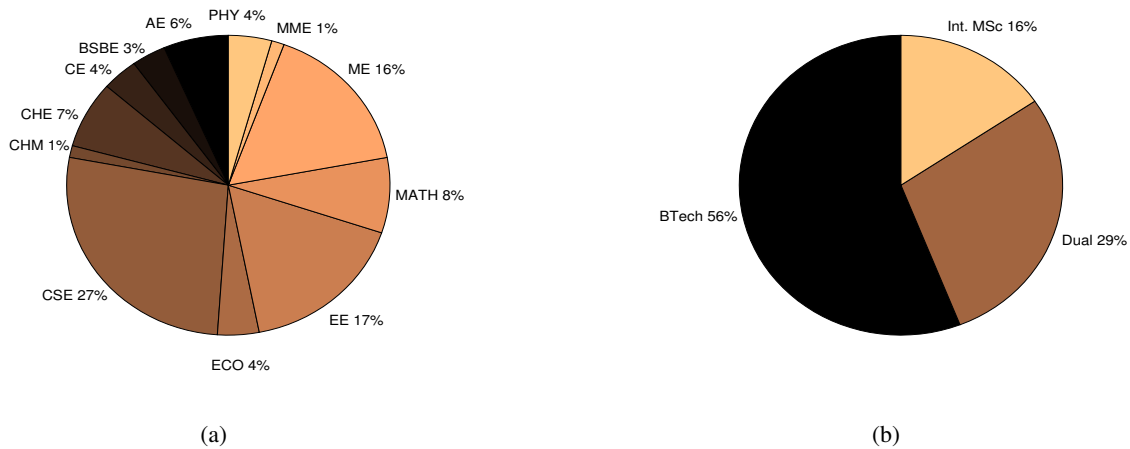
Figure 3. Percent vote for (a) each department and (b) each program as the second preference.

Figure 3(a) shows the percentage of students choosing various departments as their second preferences. Similar data related to various programs is shown in Figure 3(b). The data looks very similar in nature to the previous one, though less skewed.[1] Taken together, 71% of the respondents chose CSE as their first or second preference.

Figure 4(a) shows the combined department-program data for first preference. For example, 44% students chose CSE as the most preferred department, while 31% chose a BTech in CSE as the most preferred degree option and

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[1] Some students chose BTech as their first as well as second preferences leading to a total of more than 100% of students choosing BTech as top two preferences.
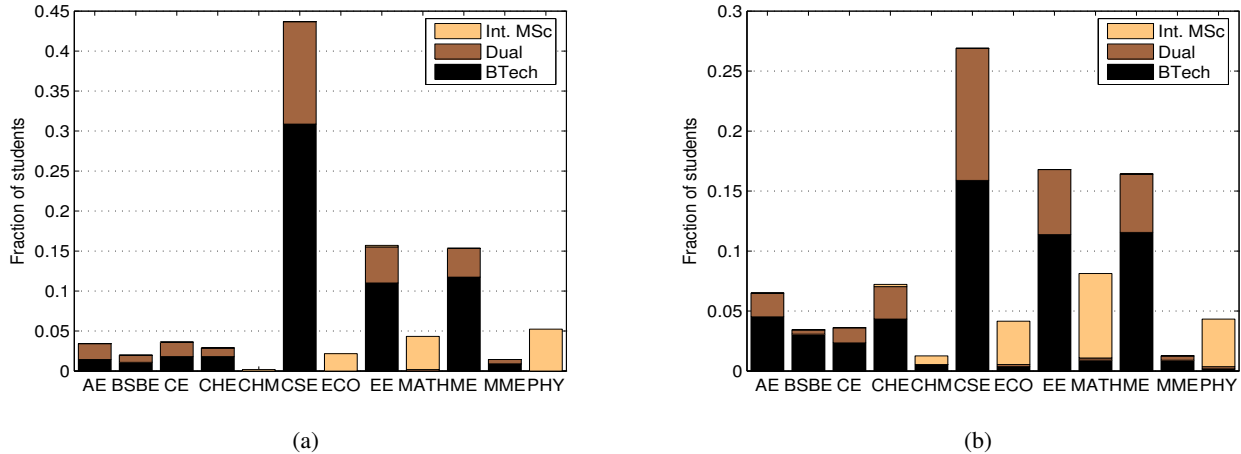
Figure 4. Combined department-program data: (a) first preference, (b) second preference.

another 13% chose a BTech/MTech in CSE as the degree of choice. Similar data for the second preference is presented in Figure 4(b).

Next, we turn to the second survey question. In this question, we gave six different degree options to the students and asked them to rank these options. The question is presented below.

```
If IIT Kanpur introduces the following new programs or degrees, how would
you rank them in order of preference from most (1) to least favourite (6)
option:
NOTE: All terms marked with an asterisk (*) are explained below.
1. B.Tech. in one department with a minor* in another subject
2. B.Tech. in Engineering Sciences**
3. B.Tech. Dual degree in two departments (Courses in the second dept.
would require about two to three semesters of work beyond the courses done
in the first dept.)
4. BT-MBA Dual degree
5. B.S. (upgradeable to M.Sc. Integrated: similar to BT/MT Dual)
6. B.S. program in HSS such as Psychology, Economics etc. (upgradeable to M.S.)

*Minor means sub-specialisation which would require taking 4-5 courses in
one Dept. / one HSS subject (which is NOT your own department).

**Engineering Sciences is a multidisciplinary program designed to integrate
the sciences with areas of traditional engineering such as research, design
and analysis. It includes a core of basic courses in mathematics, physics
and chemistry and electives from areas such as fluid dynamics, solid
mechanics, operations research, information technology engineering, dynamical
systems, bioengineering, solid-state devices, materials science,
electromagnetics, nanoscience, nanotechnology, energy, and optics.
```

Figure 5 shows, for each degree option, the number of students voting it as highest, high, above average, below average, low, or lowest. A few observations can be made without pain. Option 1, namely, BTech in one department with a minor in another subject is voted as the highest ranked option by almost 270 students (out of 554), while option 6, namely, BS in HSS (Psychology, Economics, etc.) is voted as the lowest ranked option

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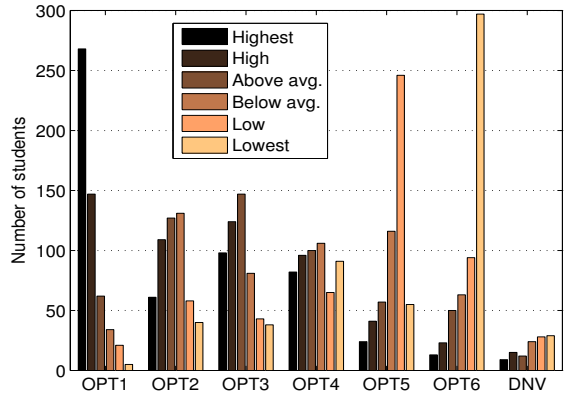
Figure 5. Degree option ranks. `DNV` stands for category of students that chose not to specify at least one rank.

by almost 300 students. Nearly 250 students ranked a BS degree option as "low". Interestingly, a BTech in Engineering Science (option 2) does not turn out to be a highly preferred option. More astonishingly, a BTech-MBA degree (option 4) does not fare well either.
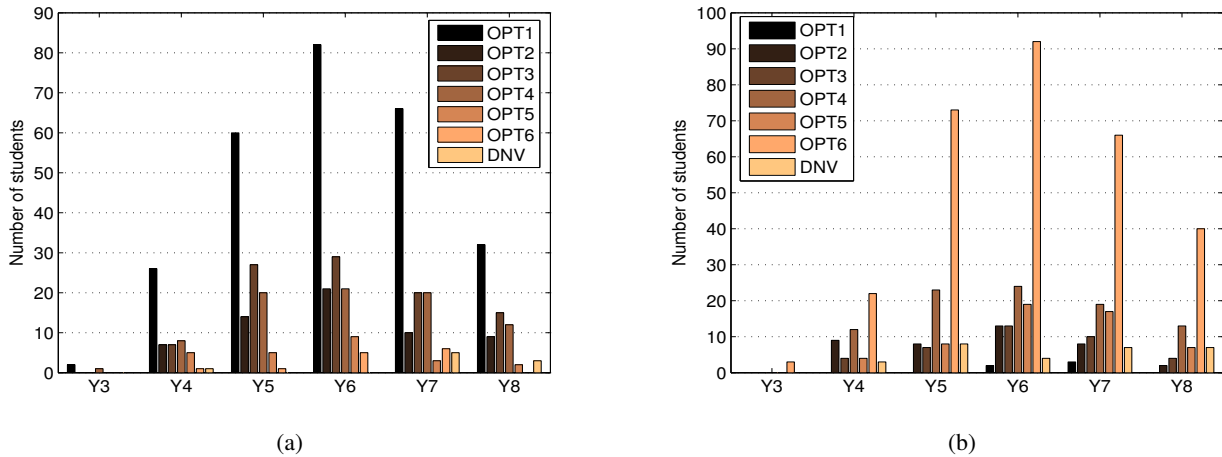

Figure 6. Year-wise distribution of (a) highest and (b) lowest ranked degree options.

To further understand any year-wise bias of the degree option ranks, Figure 6(a) and Figure 6(b) respectively present the highest and the lowest ranked degree options for respondents from each year. Most of the students from each year ranked option 1 as the most preferred one, while option 6 is the lowest ranked option for most students.

Next, we present the third question. This question was related to exit options. The question is presented below.

```
Suppose there were an exit option (a degree) called B.Tech Pass for those
students who have spent at least four years in IIT, but are not doing
academically well and have only completed 70% of the credits required to
graduate with a regular B.Tech. degree. Do you think this is a good option?
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Figure 7 presents the year-wise number of students agreeing and disagreeing to the aforementioned exit option. Overall, 320 students out of 554 respondents voted for the exit option.
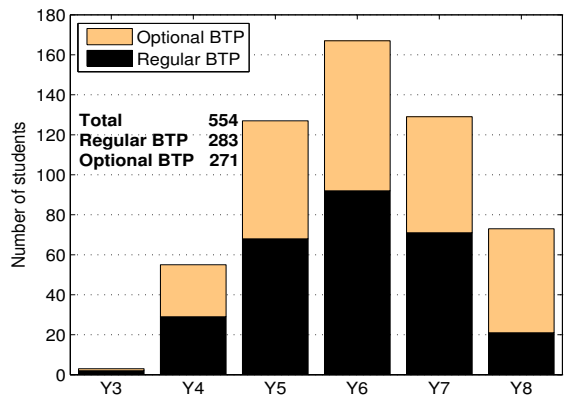
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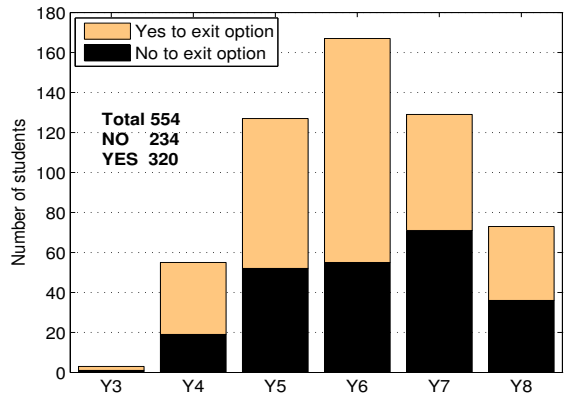
Figure 7. Year-wise distribution of exit option polls.

The fourth question is presented below. This question relates to the final year BTech projects (referred to as BTP).

```
Given a choice, which of the following two options would you prefer:
1. A program with a BTP.
2. A program in which BTP is an elective. You can have do additional course
work in place of the BTP.
```


Figure 8. Year-wise distribution of BTP polls.

Figure 8 presents the year-wise number of students choosing an optional BTP or a regular BTP (in the current form). Interestingly, the overall data is slightly skewed toward the current practice of regular BTP.