PLACEMENT AND INTERNSHIP REPORT

Academic Year 2022-2023

Placement Office
Indian Institute of Technology, Bombay
August 2023

Index

Introduction

IIT Bombay had 2174 students registering for the campus placement season from July 2022 - June 2023 of which 1845 students actively participated in placements and 1516 students secured jobs, which is the highest number to date. The placements were conducted in a hybrid mode consisting of interviews conducted both online and off-line. 1316 Job Announcement Forms were filled by 531 companies this year, excluding the pre-placement offers. Highest international and domestic salaries (based on cost to company (CTC)) at IIT Bombay were Rs. 3.67 crore per annum (CPA) and Rs.1.68 CPA, respectively. Sixteen offers of above Rs. 1 crore per annum and sixty-five international offers were accepted at IIT Bombay during the placement season 2022-23. Of the 300 pre-placement offers 194 were accepted by students at IIT Bombay. The average salary of the students placed this season was Rs 21.82 Lakhs per annum (CTC). The placement season is summarized in Table 1.

Table1: Highlights of Placement Season 2022-23

Key Metric	Details
Number of Registered Students	2174
Number of Students who Actively Participated	1845
Number of Companies Participated	384
Total Number of Companies Making Job Offers	324
Total Number of Job Offers	1788
Number of Accepted Offers	1516
Number of Pre-Placement Offers	300
Pre-Placement Offers accepted	194
Job Offers above Rs. 1 crore accepted	16
International Job Offers accepted	65
Highest International Salary	Rs. 3.67 Crore
Highest Domestic Salary (C.T.C.)	Rs. 1.68 crore
Average Salary Package of Selected Students	Rs. 21.82 Lakhs per annum
Top Recruiting Sector	Engineering & Technology

Student preparation

Keeping the students well prepared for what they are likely to face in the corporate world is the responsibility of every academic institute. Students undergo challenging coursework and are exposed to research-based projects, along with a host of sports, cultural and organizational activities on the vibrant IIT Bombay campus. Through the placement cell, students at IIT Bombay secure internships in top-rated companies and universities, not only preparing them for higher studies and / or industry jobs but also often resulting in pre-placement offers. The placement team at IIT Bombay takes every necessary step to train and equip students to succeed in securing the best jobs available for graduating students. In this direction "Boot Camps" were held in collaboration with Career Cell to prepare students for profiles in coding, consultancy, finance, analytics etc. In addition, preparatory programs were conducted to enhance the communication skills, group dynamics and interview skills. Overall, these programs provided an insight into the job domains and also prepared the aspirants for the various selection rounds conducted by companies. The students were assigned mentors for guidance and a series of aptitude tests were conducted to improve the problem-solving skills. The preparatory activities sourced information from various alumni, where the alumni background was mapped according to student preference. Various department level activities were also conducted to strengthen core domain expertise of the students. Overall, the various student training programs conducted by the placement team contributed to a successful placement season.

Recruiter profile

This year 65 international offers were made to IIT Bombay students from different firms based in the USA, Japan, United Kingdom, Netherlands, Hong Kong and Taiwan. Due to the war in Ukraine and the subdued global economy, the number of international offers were similar to last year. The average package offered during IIT Bombay placement season 2022-2023 stood at INR 21.82 LPA in comparison to the average packages in 2021-22 and 2020-21 which were INR 21.50 LPA and INR 17.91 LPA, respectively. The engineering and technology sector recruited the highest numbers of students. In various engineering domains, 458 students were selected in 97 core engineering companies at entry-level positions. Information technology and software hiring has been less this season compared to last year. Nevertheless, around 302 students have been offered IT/software jobs by over 88 companies,

making the IT sector second largest recruiters after the engineering sector. Over 154 consulting offers were made by 29 consulting companies. Trading, banking and fintech companies were also prominent recruiters. 76 offers were made by 32 financial service firms this year. Profiles in artificial intelligence, machine learning, product management, mobility, data science and analytics, and education also saw brisk hiring trends. Nineteen design companies made 33 job offers. The education sector saw seven companies participating with 81 jobs offered. The Research & Development sector witnessed companies in Automation, Energy Science, Battery Technology, Chemical and Mechanical Research, Energy Efficient Solutions, Application Development, Materials Research, Power Electronics, AI / ML and Research Laboratories, where 30 organizations offered 92 positions in 2022 – 23. Table 2 lists the total number of offers and number of pre-placement offers made and accepted in 2022-23. The sector-wise distribution of companies making offers and number of accepted offers are listed in Tables 3 and 4 as well as Figure 1.

Table 2: Pre-placement and total offers received and accepted in 2022 – 2023.

Year	Pre-placement offers		Total Job offers	
	Received	Accepted	Received	Accepted
2022-23	300	194	1788	1516

Table 3: Distribution of offers from different sectors (includes PPOs).

Sector	Number of Offers	Number of companies
Analytics	79	21
Consulting	154	29
Data Science	25	13
Design	33	19
Education	81	7
Engineering & Technology	458	97
Finance	76	32
IT/Software	302	88
Public Sector Undertaking	14	4
Research & Development	92	30
Services	9	4
Others	193	59
Total	**1516**	**403***

*is not total number of companies as some companies have made offers in multiple sector
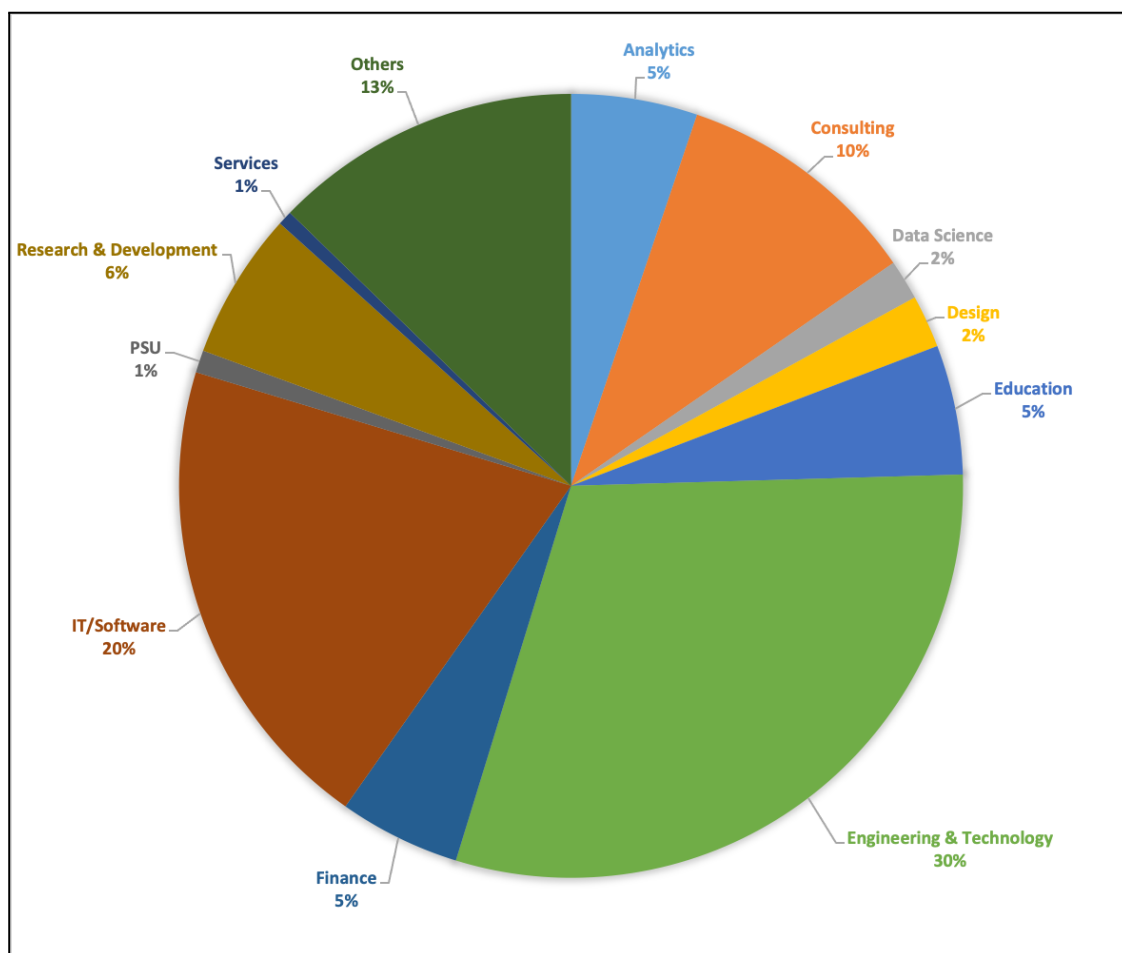
Figure 1. Distribution of offers made in different sectors.

Program-wise placement statistics

Overall, 82 percent of the students who actively participated in placement season 2022-23 were successfully placed. From students registered in the B.Tech, Dual degree and M.Tech programs, close to 90% of those participating in placements were able to secure jobs. Placement percentage in programs other than those mentioned above was close to 65%, except for the PhD program. Though the placement percent of PhD students was low, there was a healthy increase in the number of students placed from this program. All students registering for placements do not necessarily participate actively, opting for higher studies. Also, students also get placed through channels other than campus placements. The program-wise placement data is provided in Table 4 and Figure 2. The students participating count excludes students who opted for higher studies or had other career options, and hence de-registered from the placement process.

Table 4: Program-wise placement data 2022- 2023 (including PPOs)

Program	Registered	Participated	Placed	Percentage placed
B.Des.	23	12	7	58%
B.S.	57	43	39	90%
B.Tech.	791	679	598	88%
Dual Degree (B.Des. + M. Des.)	10	9	8	88%
Dual Degree (B.Tech. + M.Tech.)	215	187	178	95%
M.Des.	76	63	39	61%
M.P.P	12	9	6	66%
M.Sc.	214	159	110	69%
M.Tech.	583	532	479	90%
Ph.D.	166	131	41	31%
Others	27	21	11	52%
Grand Total	**2174**	**1845**	**1516**	**82%**

*Includes Dual (B.Des. + M.Des.), Dual (B.S+M.S), Dual (M.Sc. + Ph.D.), Dual (M.Tech. + Ph.D.), M.Phill, M.S by Research (Exit)
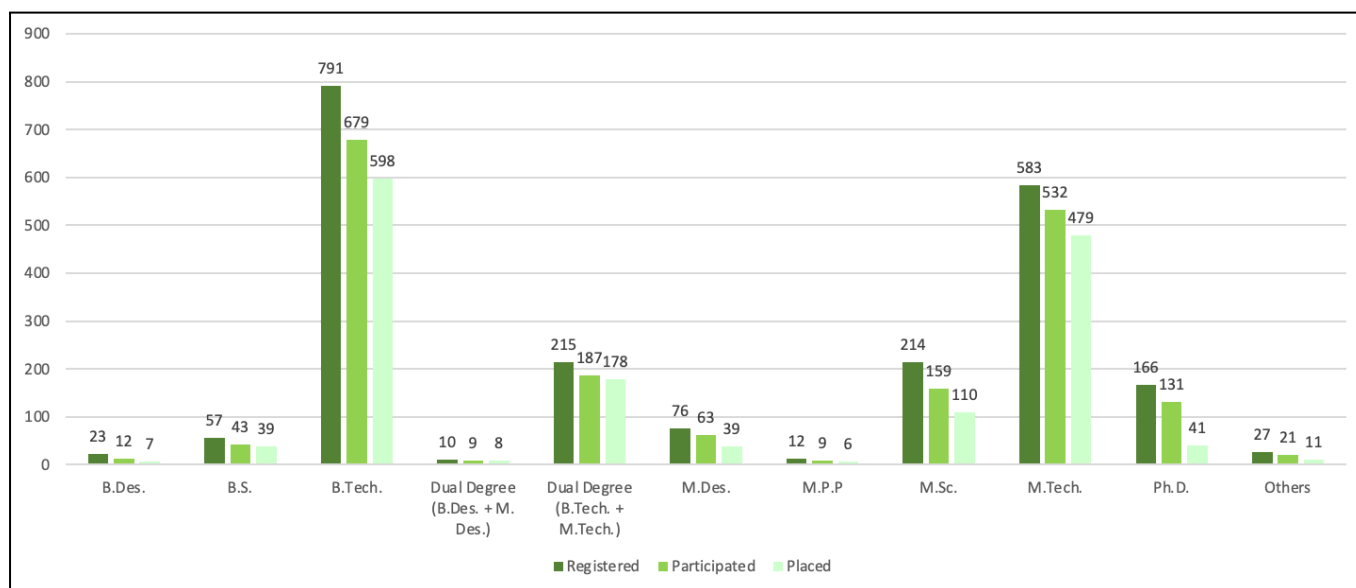

Figure 2: Program-wise placement in numbers

Department-wise placement statistics

IIT Bombay has 23 different departments, spanning various under-graduate, post graduate and doctoral degree programs. Along with these departments, several interdisciplinary schools and focused research centers also graduate students with Bachelors+Masters (Dual Degree), Masters and PhD degrees. Student's may also earn an honors degree from their parent department and /or a minor degree from another department/center by taking extra credits. The placement team endeavors to attract companies from core as well as non-core sectors for students. The placement statistics of students from all programs for major departments / centers during the placement season 2022-23 is compared with placement data from the preceding two years and shown in Table 5 and Figure 3. The placement numbers continue to be strong across departments.

Table 5: Department-wise classification of offers

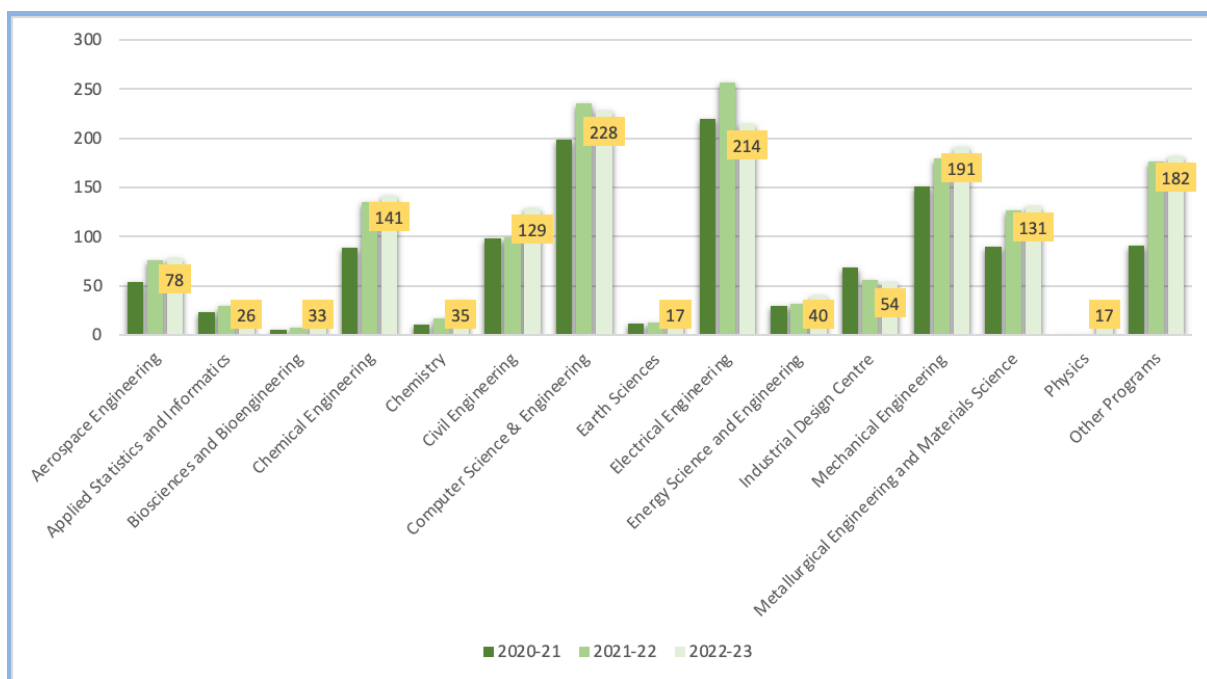| Department / Centre	2020-21	2021-22	2022-23
Aerospace Engineering	54	76	78
Applied Statistics and Informatics	23	29	26
Biosciences and Bioengineering	5	7	33
Chemical Engineering	89	135	141
Chemistry	10	17	35
Civil Engineering	98	99	129
Computer Science & Engineering	199	236	228
Earth Sciences	12	13	17
Electrical Engineering	220	257	214
Energy Science and Engineering	29	32	40
Industrial Design Centre	69	56	54
Mechanical Engineering	151	180	191
Metallurgical Engineering and Materials Science	90	127	131
Physics	1	1	17
Other Programs	91	176	182
Total	**1150**	**1441**	**1516**

Figure 3. Department-wise classification of offers

Salary statistics

The job offers by recruiting organizations are categorized based on the gross compensation packages. Factors other than compensation package, such as job profile, past association etc. may sometimes influence student choice of a company. Salary-wise classification of total offers made in the year 2022-23 is shown in Table 6 and Figure 4.

Table 6: Placement details based on compensation including PPOs

Range of gross salary (in Rupees) (Lakhs per annum)	Number of Offers	Number of Companies
Above 20	277	75
Between 16.75 to 20	261	72
Between 14 to 16.75	234	66
Between 12 to 14	216	48
Between 10 to 12	187	55
Between 8 to 10	201	45
Between 6 to 8	125	25
Between 0 to 6	15	7
Total	**1516**	**373***

*is not the sum total of companies as some companies may have given multiple jobs in different salary bands
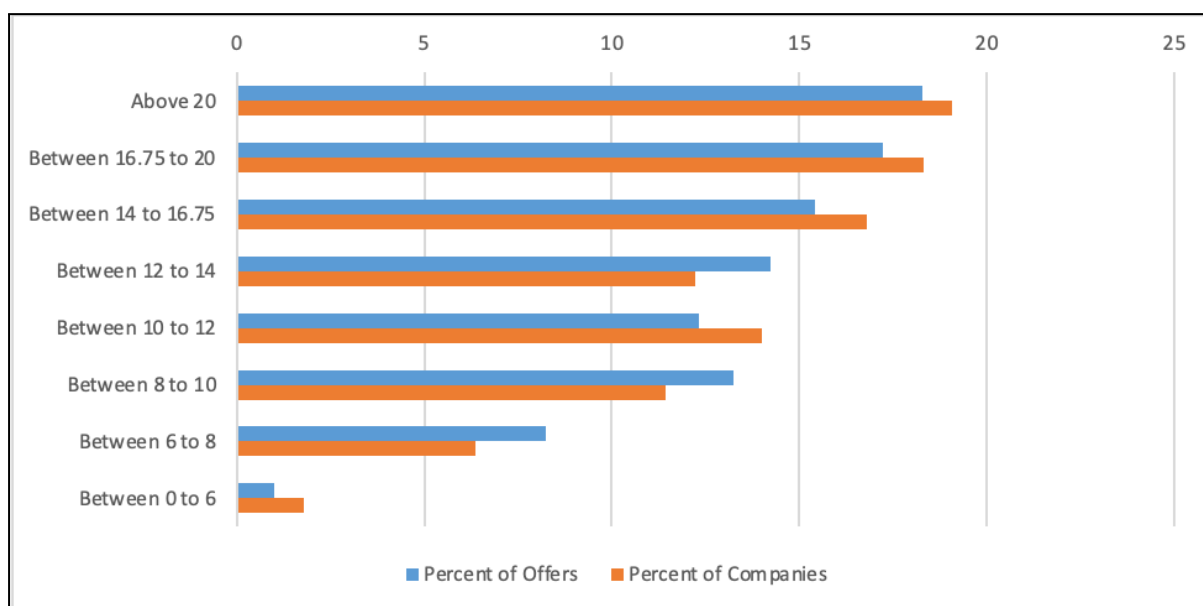
Figure 4. Compensation-wise distribution of offers. (in Rs. Lakhs Per Annum)

Comparison of average salary, international and Pre-Placement Offers

The Average Gross Salary offered was Rs. 16.66 LPA and the average salary (Based on CTC) was Rs. 21.82 LPA. The number of Pre-Placement Offers (PPO) was 194, while the number of international offers was 65. This suggests an increasing and a positive trend in the pay package offered by various organizations as can be seen in Table 7. The distribution of overseas offers as well as MNCs and Indian companies is listed in Table 8.

Table 7: Average salary, international and Pre-Placement Offer details

Description	2020 -2021	2021-22	2022 - 2023
Average Gross Salary (in LPA*)	13.67	16.50	16.66
Average CTC (in LPA*)	17.91	21.50	21.82
Number of International Offers	58	66	65
Number of Pre-Placement Offers	149	201	194

*LPA–Lakhs per annum (in rupees)

Table 8: Placement statistics based on Company Type / Geography

Placement statistics based on Company Type / Geography	Number of students
Placement Outside India (International Location)	65
Placements in MNC's in India	790
Placements in Indian Companies	661
Total	**1516**

Year-wise comparison of placement

Despite the challenging market situation this year, IIT Bombay continued to be the preferred institute for most of the top firms. Table 9 and Figure 5 show the comparison of students placed over the last three years from the major degree programs.

Table 9: Comparison of the number of students placed in the last three years

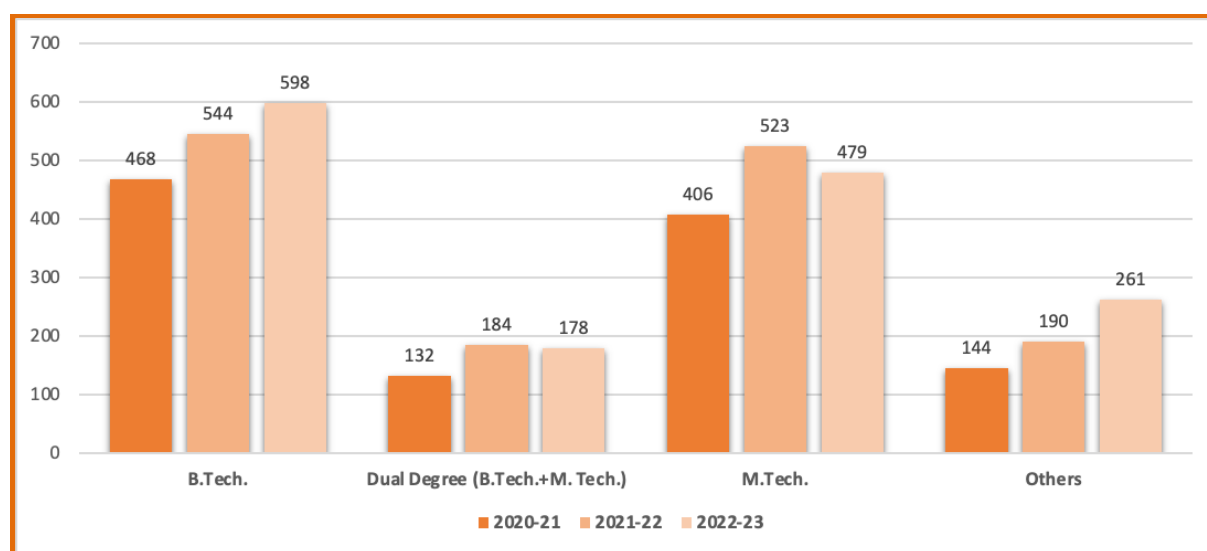| Program	2020-21	2021-22	2022-23
B.Tech.	468	544	598
Dual Degree (B.Tech.+M. Tech.)	132	184	178
M.Tech.	406	523	479
Others	144	190	261
Total	**1150**	**1441**	**1516**

Figure 5: Comparison of the number of students placed in the last three years

Sector-wise statistics for different programs

B.Tech. and M.Tech. students maintained almost the same demand amongst companies of various sectors. Sectors such as Engineering & Technology, IT/Software, Consulting and Research & Development continued to recruit a large fraction of the graduating batch of students. Sector-wise statistics for different programs are shown in Table 10.

Table 10. Sector-wise number of offers for different programs

Sectors	B.Tech.	Dual Degree	M.Tech.	Other Programs	Total
Analytics	36	14	17	12	79
Consulting	75	28	33	18	154
Data Science	7	3	11	4	25
Design	1	3	4	25	33
Education	5	1	21	54	81
Engineering & Technology	129	58	213	58	458
Finance	52	12	1	11	76
IT/Software	156	32	95	19	302
Public Sector Undertaking	4	2	4	4	14
Product Management	10	4	2	3	19
Research & Development	27	14	37	14	92
Services	5	0	4	0	9
Others	91	20	37	26	174
Total	**598**	**191**	**479**	**248**	**1516**

PhD student placement

The PhD student placement details are as below:

Total number of registered students :166

Number of active participants :131

Total number of accepted offers: 41

Highest Salary (CTC) from allocated offers (in INR): Rs. 29,00,000

Average CTC from allocated offers (in INR): Rs. 18,34,000

Percentage of offers to active applicants: 31.66%

Percentage increase from last year + 34.16%

Table 11 compares the recruitment for the past 3 years.

Table11: Ph.D. Students recruitment comparison three years

Academic Year	2022 – 2023	2021 – 2022	2020 – 2021
Total Participated	131	67	76
Total Placed	41	30	14

Internships 2022–2023

Pre-final year students have been offered Pre-placement Offers (PPOs) at the end of their internship term. PPOs at IIT Bombay have improved this year. Recruiter interest was highest for computer science engineering with most openings in advanced software programming in Big Data, IoT, AI and ML, R&D and consulting. It is expected that the rising PPOs will reduce the institute's dependence on placements during the regular placement season. This year 300 PPOs were received, of which 194 have been accepted by the students. The hiring trend has been on the rise specifically for technical roles, with more companies giving PPOs through internships.

Department-wise internship offers

This year students from all the departments were in demand by firms and universities alike for internship positions. The demand for students from departments such as Computer Science was strong while that for Mechanical and Electrical Engineering students was high. Table 12 and 6 Figure 6 show the department-wise distribution of internship offers made over the past 3 years.

Table 12: Department-wise internship offers over years

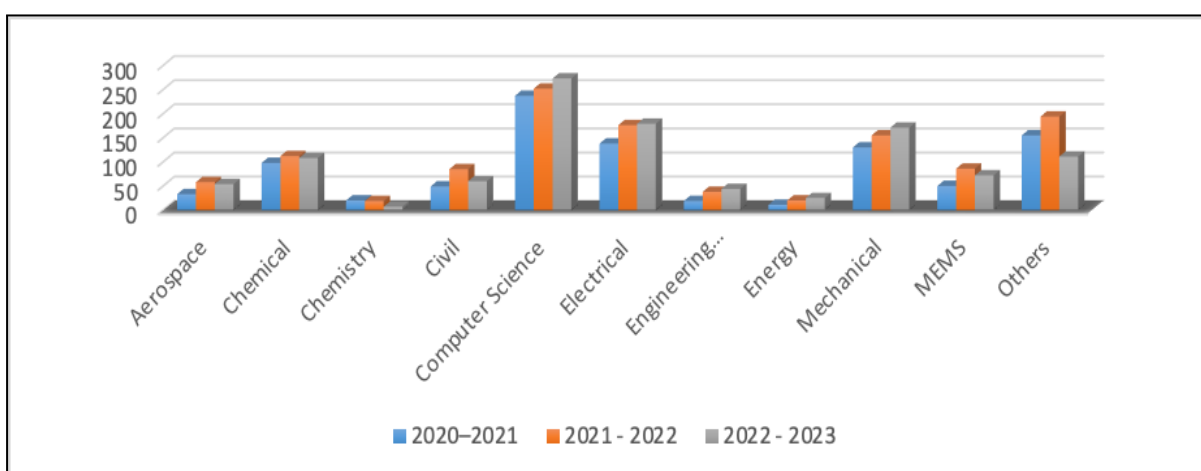| Department	2020–2021	2021 - 2022	2022 - 2023
Aerospace	33	58	54
Chemical	98	112	108
Chemistry	20	19	7
Civil	49	85	60
Computer Science	237	252	273
Electrical	138	176	179
Engineering Physics	19	38	44
Energy	11	20	25
Mechanical	130	155	171
MEMS	50	86	72
Others	155	194	111
Total	**940**	**1195**	**1104**

Figure 6. Department-wise classification of Internship offers

Summer internships usually begin in May and continue till mid-July, whereas winter internships are pursued in the month of December. The number of summer internship offers exceeds the number of winter internships, which is attributable mainly to the longer duration available in summer.

Table 13. Summer vs. winter internship offers

Number of internships	Summer internships	Winter internships
1104	963	141

Company vs. University internship offers

Companies of various business sectors offer internship positions to the students. This option presents an opportunity to gain industrial exposure and broaden one's skill-set in the domain of interest. A few years ago, the Institute started the credit-based internship program, by means of which the students could leverage the performance in their internship towards the academic credit requirement.

Table 14. Companies vs. Universities internship offers

Number of internships	Company offers	University offers
1104	1009	95

Conclusion

The companies recruited in hybrid mode throughout the placement season in academic year 2022 - 23. The number of registered students in the 2022 - 2023 placement drive has increased by 5.7 % in comparison with last year. IIT Bombay has achieved the highest ever number of students placed this year with total number of accepted offers being 1516 as on 31st July 2023 compared to total of 1441 for the previous placement season, 2021-22. This is a 5.2 % increase in total number of students placed indicating higher selections due to higher buoyancy in demand. The total recruited Ph.D. students are 41 out of 131 active participants and have shown significant improvement over last year. Considering the total number of participating students, the placement percentage is 82.16%. The overall average salary packages (based on CTC) showed a slight increase of 1.5 % over last year from Rs. 21.5 LPA to Rs. 21.82 LPA. Job scenario remains optimistic based on placement data over the last two years as the job generation has been robust after resumption of economic activity subsequent to the COVID – 19 pandemic. The total number of companies offering jobs has increased from 325 companies last year to 384 this year. Overall, the upward trend of placements continued in season 2022-23, confirming that IIT Bombay is the preferred recruiting destination for major Indian and multinational companies.

Annexure 1 : DEPARTMENT-WISE STATISTICS for Year 2022 – 2023				
Department	**Program**	**Participated**	**Placed**	**% Placed**
Aerospace Engineering	B.Tech.	48	41	85.41
	M.Tech.	36	30	83.33
	Ph.D.	4	0	0
	Dual Degree (M.Tech. + Ph.D.)	1	0	0
	Dual Degree (B.Tech. + M.Tech.)	8	7	87.5
Department total		97	78	80.41
Applied Statistics and Informatics	M.Sc.	31	26	83.87
Department total		31	26	83.87
Biosciences and Bioengineering	M.Tech.	19	17	89.47
	Dual Degree (M.Sc. + Ph.D.)	1	1	100
	M.Sc.	15	14	93.33
	Ph.D.	5	1	20
Department total		40	33	82.5
Centre for Policy Studies	Ph.D.	2	0	0
	M.P.P	9	6	66.67
Department total		11	6	54.54
Centre for Research In Nanotechnology and Science	Ph.D.	5	0	0
Department total		5	0	0
Centre for Urban Science and Engineering	M.U.D.E	1	0	0
	M.Tech	4	2	50
Department total		5	2	40
Centre of Studies in Resources Engineering	Ph.D.	1	0	0
Department total		1	0	0
Chemical Engineering	B.Tech.	125	105	84
	M.Tech.	31	23	74.19
	Ph.D.	8	5	62.5
	M.S. by research	2	2	100
	Dual Degree (B.Tech. + M.Tech.)	6	6	100
	Dual Degree (M.Tech. + Ph.D.)	0	0	-
Department total		172	141	81.97

Department	Program	Participated	Placed	% Placed
Chemistry	B.S.	14	11	78.57
	M.Sc.	29	20	68.97
	Ph.D.	10	2	20
	Dual Degree (B.S. + M.Sc.)	2	1	50
	Dual Degree (B.S. + M.Tech.)	0	0	-
	Integrated M.Sc.	1	1	100
Department total		56	35	62.5
Civil Engineering	B.Tech.	96	80	83.33
	M.Tech.	43	41	95.35
	Ph.D.	10	3	30
	Dual Degree (B.Tech. + M.Tech.)	5	5	100
Department total		154	129	83.76
Climate Studies	Ph.D.	0	0	-
Department total		0	0	-
Computer Science & Engineering	B.Tech.	131	128	97.7
	M.Tech.	96	96	100
	Ph.D.	2	2	100
	M.S. by research	3	2	66.67
Department total		232	228	98.27
Earth Sciences	M.Tech.	11	6	54.55
	M.Sc.	33	11	33.33
	Ph.D.	2	0	0
Department total		46	17	36.95
Economics	B.S.	23	22	95.65
Department total		23	22	95.65
Educational Technology	M.Tech.	6	4	66.67
	Ph.D.	0	0	-
Department total		6	4	66.67
Electrical Engineering	B.Tech.	60	52	86.67
	M.Tech.	105	94	89.52
	Ph.D.	13	5	38.46
	M.S. by research (Exit Degree)	1	1	100
	Dual Degree (B.Tech. + M.Tech.)	66	62	93.93
	Dual Degree (M.Tech. + Ph.D.)	1	0	0
Department total		246	214	86.99

Department	Program	Participated	Placed	% Placed
Energy Science and Engineering	M. Tech.	17	17	100
	M.Sc.	1	0	0
	Dual Degree (B.Tech. + M.Tech.)	22	21	95.45
	Dual Degree (M.Sc. + Ph.D.)	1	1	100
	Ph.D.	7	1	14.29
Department total		50	40	80
Engineering Physics	B.Tech.	25	21	84
	Dual Degree (B.Tech. + M.Tech.)	5	4	80
Department total		30	25	83.33
Environmental Science and Engineering	M.Tech.	17	14	82.35
	M.Sc.	2	1	50.00
	Dual Degree (M.Sc. + Ph.D.)	1	0	0
	M.Sc. (Exit Degree)	2	1	50.00
	Dual Degree (B.Tech. + M.Tech.)	20	19	95.00
	Ph.D.	3	0	0
Department total		45	35	77.77
Geo-informatics and Natural Resources Engineering	M.Tech.	19	17	89.47
Department total		19	17	89.47
Industrial Engineering & Operations Research	M.Tech.	13	11	84.62
	M.Sc.	7	6	85.71
	M.Sc. (Exit Degree)	1	0	0
	Dual Degree (M.Sc. + Ph.D.)	1	0	0
Department total		22	17	77.27
Industrial Design Centre	B.Des.	12	7	58.33
	Dual Degree (B.Des. + M. Des.)	9	8	88.89
	M.Des.	63	39	61.9
Department total		84	54	64.28
Humanities & Social Sciences	M.Phil.	6	1	16.66
	Ph.D.	2	0	0
Department total		8	1	12.5

Department	Program	Participated	Placed	% Placed
Mathematics	B.S.	6	6	100
	Dual Degree (B.Sc + M.tech)	1	1	100
	M.Sc.	19	17	89.47
	Integrated M.Sc.	1	1	100
	Ph.D.	3	0	0
Department total		30	25	83.33
Mechanical Engineering	B.Tech.	125	112	89.6
	Dual Degree (B.Tech. + M.Tech.)	34	33	97.14
	Dual Degree (M.Tech. + Ph.D.)	2	1	50
	M.Tech.	35	34	97.14
	Ph.D.	24	11	45.83
Department total		220	191	86.81
Metallurgical Engineering and Materials Science	B.Tech.	69	59	94.12
	Dual Degree (B.Tech. + M.Tech.)	21	21	100
	M.Tech.	49	46	93.88
	Dual Degree (M.Tech. + Ph.D.)	1	0	0
	Ph.D.	12	5	41.67
Department total		152	131	86.18
Physics	M.Sc.	22	15	68.18
	Ph.D.	4	2	50.00
Department total		26	17	65.38
School of Management	Ph.D.	1	0	0
Department total		1	0	0
Systems & Control Engineering	M.Tech.	6	6	100
	Ph.D.	2	1	50
Department total		8	7	87.5
Technology and Development	M.Tech.	25	21	84
Department total		25	21	84
Total of All Departments		**1845**	**1516**	**82.16**