BHARATIYA VIDYA BHAVAN'S

SARDAR PATEL INSTITUTE OF TECHNOLOGY

ALUMNI FEEDBACK ANALYSIS 2020-21

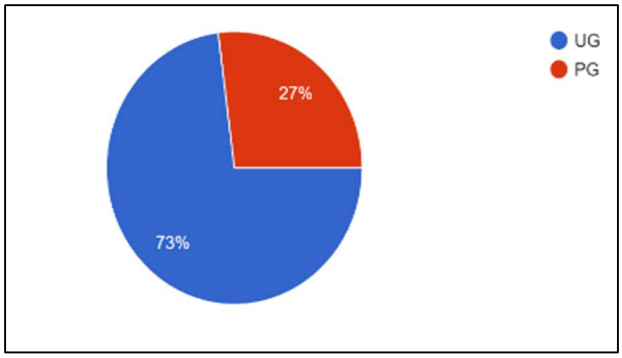
INTRODUCTION

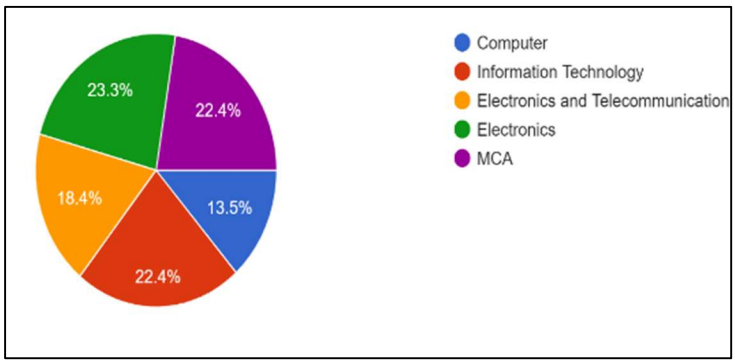
The institution collects the feedback on Institute Perception, Institute Mission, Department Perception, Department vision, Department Mission, curriculum aspects, PEO, PSO, PO, from different stakeholders such as the students, alumni, parents, Faculty and Employers. Institution established Academic Council in order to ensure and analyze the academic excellence at student and faculty levels.

S.P.I.T thoroughly reviews the curriculum for every academic year. The college maintains an IQAC as a quality consistence and quality enhancement measure. Various departments and committees work for Career Guidance, Anti-Ragging and Sexual Harassment Committee, etc. reinforce the curriculum by incorporating suggestions from various stake holders and experts. The college conducts annual Alumni Meet, in which suggestions and feedback is received from Alumni students. Feedback from industry/ recruiters and professionals is obtained through IQAC and department feedback committee. The provided feedback data is analyzed and incorporated for necessary implementation in curriculum.

METHODOLOGY

The feedback form was shared with all the alumni and a total of 124 respondents who had graduated in May, 2020 contributed to the feedback process. The department-wise break -up of undergraduates and postgraduates is given below :





The feedback from the batch of 2019-2020 was divided into 5 categories and the questions were grouped into the relevant categories. The alumni were told to rate their responses on a scale of one to five as follows :

5 : Excellent, 4: Very good, 3: good, 2: Average, 1: Poor

SUMMARY

A broad overview of the analysis of the alumni feedback indicates that while there is an overwhelming view that the **institute curriculum is highly focused** on employability and ranks much higher than its peers in this area, there is a perception that **improvement is needed in the area of skill development and obtaining technical knowhow**. However there seems to be general agreement that the S.P.I.T curriculum does make students ready for industry. There also seems to be a **need for greater academic flexibility** with a demand for **specialization** in a particular domain. The institute's vision of all round holistic development of students into socially and environmentally sensitive and globally competent citizens with the right values and ethics has been acknowledged. Mentoring by faculty for various competitions, hackathons, debates etc has also been acknowledged.

The alumni take **great pride in being associated with S.P.I.T** and are highly likely to recommend it to their friends and relatives There is also a lot of **enthusiasm from the alumni in engaging with their alma mater** in a variety of activities ranging from curriculum design to mentorship for projects and placements, expert talks and lectures and so on.

The alumni have also requested **greater emphasis on practical training** and courses which will get them exposure to the industry environment with respect to corporate culture, ethics and soft skills apart from core skills which will help them in getting placements. A significant chunk of the alumni has suggested a **relook at some of the institute policies** like mandatory attendance in lectures, academic credit requirements and regular training for faculty. On the research front, it has been suggested that rather than enforced efforts , there should be **incentivised research** (additional credits) which will help in generating interest rather than making it a "tick the box "activity. There are many **suggestions on curriculum design** with more programing language based courses, enhanced coding skills as well as courses on finance and accounting skills. An increased number of mock interviews have been sought including more **interdisciplinary activities** including some based on ABL. Greater support from faculty and alumni mentors have been sought on projects.

The **committed and dedicated faculty of S.P.I.T** has been given a call out by the alumni who have listed the faculty as the one of the **pillars of the institute**. **Placement opportunities, curriculum and the excellent environment** provided for learning by a very good group of peer students have also been listed as the strengths of the institute. Infrastructure such as **library, laboratories, well equipped classrooms and good academic practices** have also been appreciated by the alumni.

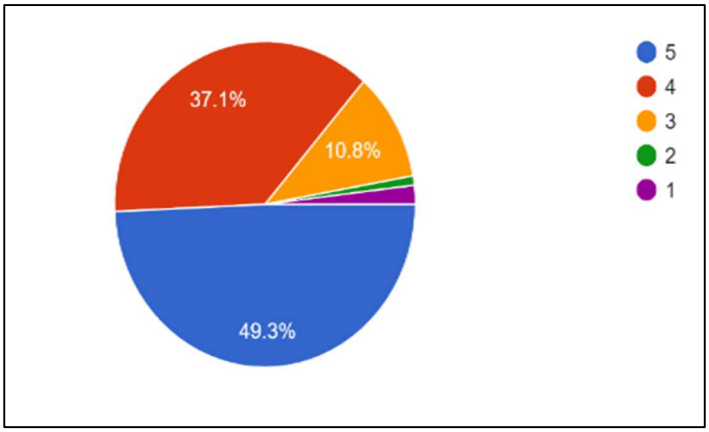
Few weaknesses have also been pointed out by some of the alumni. These include the **lack of participation by companies from the core sector** in the placement process especially for the electronics and telecommunications domain. **Attendance requirements** have again been cited as needing a relook alongwith enhanced support from office and accounts staff, submission processes, **need for digitization** and **improvement in infrastructure such as canteen and hostel facilities.**

The responses to a variety of questions has been tabulated below :

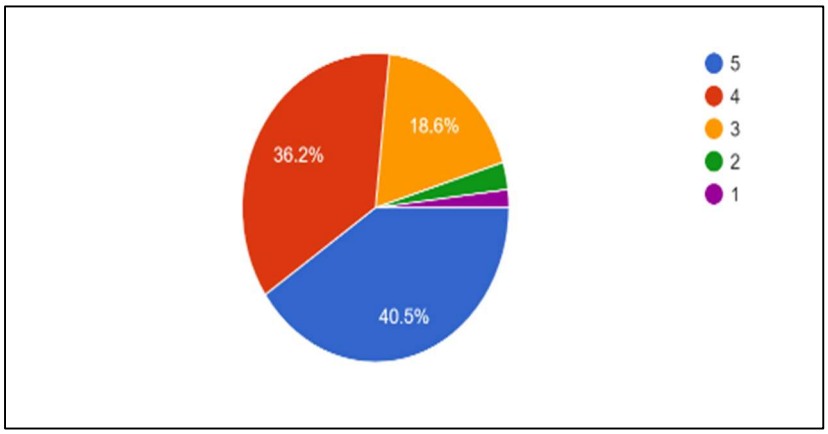
Sno	Area of feedback	Question	Responses (%)		
			5	4	3
1	Curriculum design	Focus on Employability and higher education	49.3	37.1	10.8
2		The undergraduate preparation at S.P.I.T vs other engineering college	40.5	36.2	18.6
3		Industry supported skill based courses in the syllabus	31.9	33.3	22.5
4		Technical knowhow (both theory and practice) obtained at S.P.I.T	23.6	44.2	25.5
5		Courses in the syllabus promote Entrepreneurship	25.2	34.7	23.8
6		Fundamental engineering knowledge	33.3	38.7	22.1
7		Syllabus designed to make students industry-ready	22.7	41.9	24.1
8		Academic flexibility	30.5	38	19.5
9	Co-Curricular & extra curricular activities	Holistic development of students	27.8	35.4	20.2
10		Generating awareness about Indian values, personal integrity and civic responsibility	42	36.1	16.1
11		Consideration for ethical practices, sensitivity for environment	41.6	33.2	19.8
12	College environment	Helpful for learning	37.1	42.7	16.4
13		Need to improve the general environment in the Institute/Department and attitude of the people?	29.1	34.5	21.7
14	Mentorship	Motivated to participate in various competitions	42.6	33.8	17.6
15		Research culture is encouraged	82.1	13.1	
16	Alumni Engagement	Pride at being associated with S.P.I.T as alumnus	56.1	39.2	
17		Recommend to relatives / friends	56.1	33.2	
18		Need to improve alumni involvement	36.9	35.5	
19		Willingness to be contribute to development of S.P.I.T	37.8	38.7	

I. Curriculum Design

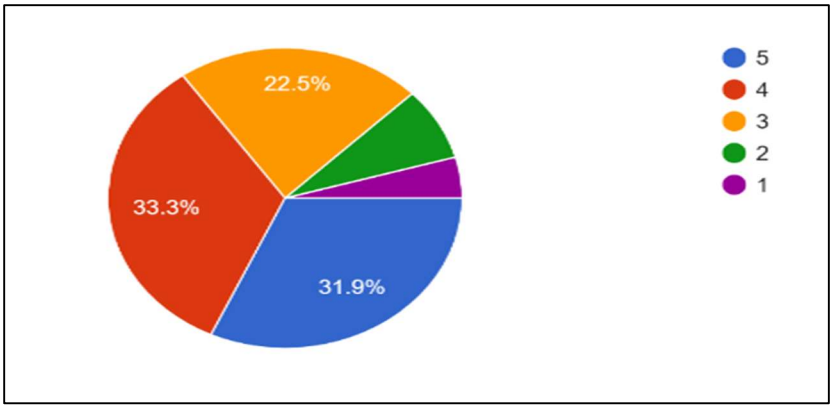
1. Employability is one of the prime focus in the Institute, as well as is the higher education



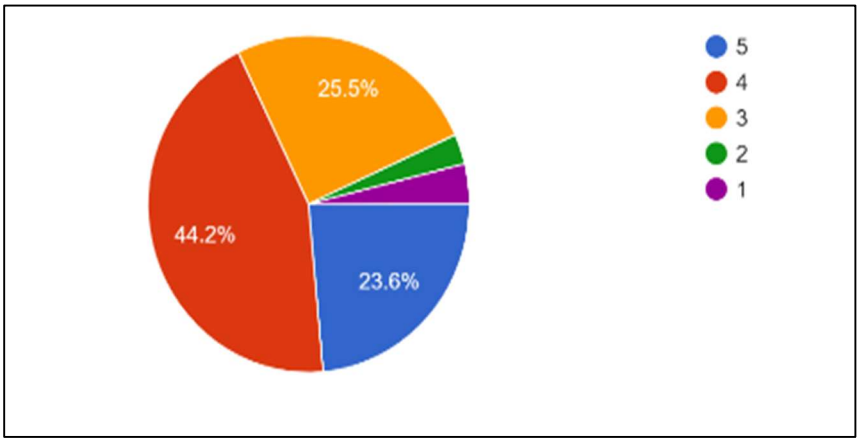
2. The undergraduate preparation at SPIT is better compared to that of your peers from other engineering college?



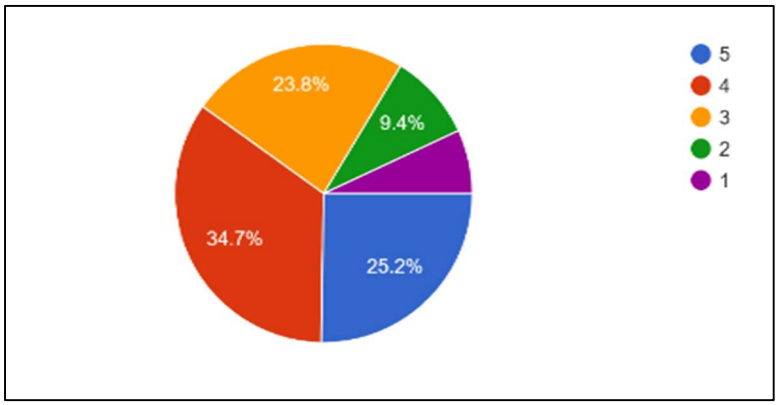
3. Industry supported skill based courses are introduced in the syllabus (through internships, visits, consultancy, projects, etc.)



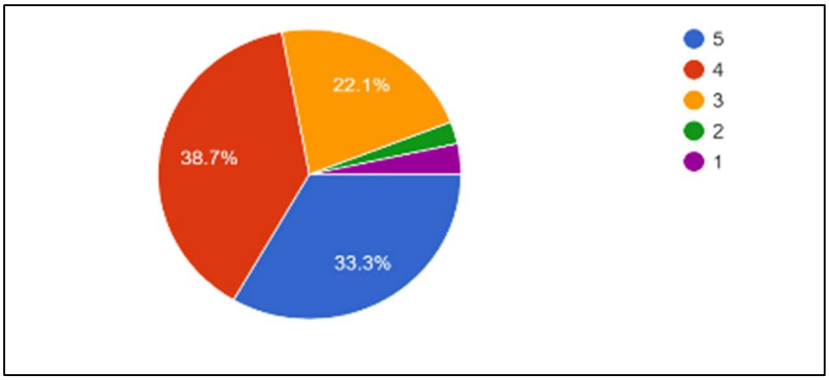
4. You have obtained sufficient technical knowhow (both theory and practice) at SPIT during your studentship period?



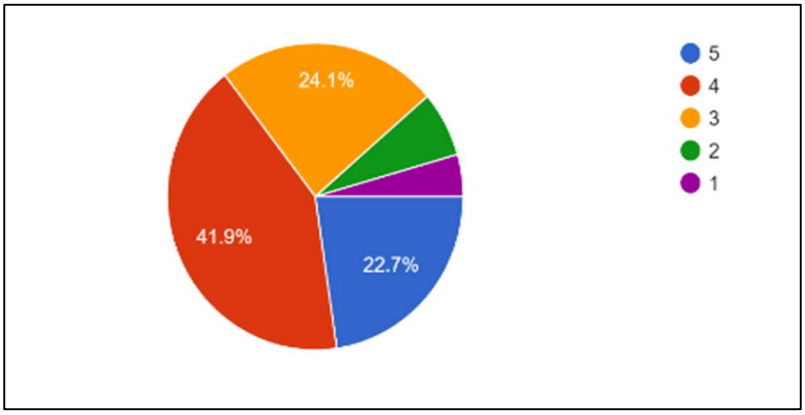
5. Courses in the syllabus promote Entrepreneurship (students are encouraged and supported to initiate startups by Startup school mentorship)



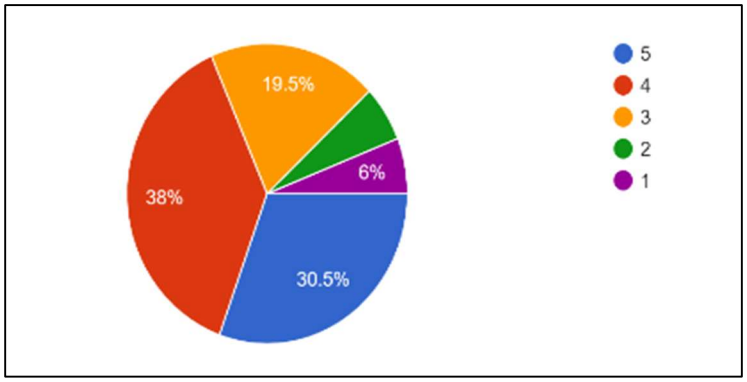
6. Fundamental engineering knowledge gained while at SPIT has helped you to become successful in your career/ profession



7. The syllabus has been designed to make students industry-ready (imparting analytical and reasoning, language and soft skills in addition to technical competencies, as demanded by the industry)

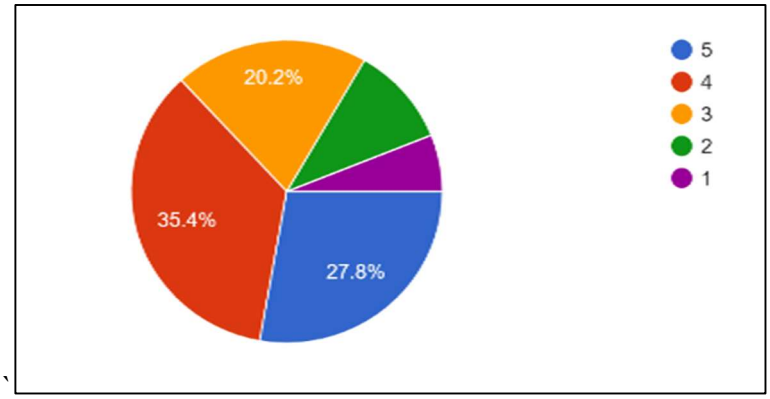


8. The academic flexibility provides opportunities to students to pursue their interest. (from vast number of pathways / electives from different areas of specialization)

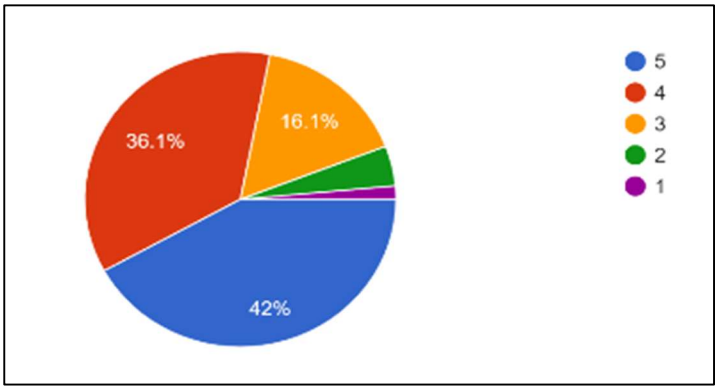


II. Co-curricular and extra-curricular activities

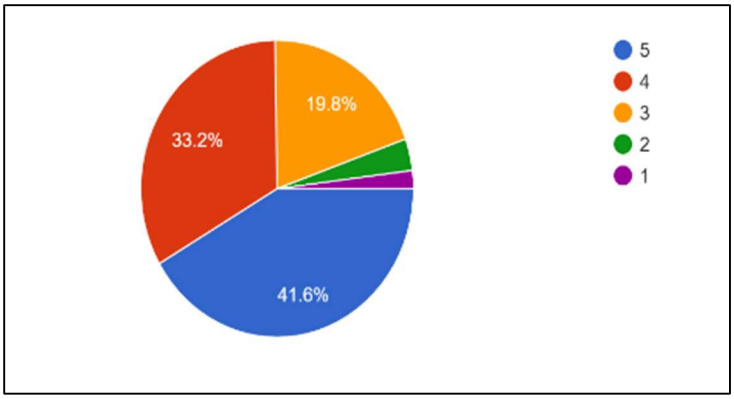
1. Holistic development of students is encouraged. (participation in various sports, cultural and co-curricular activities)



2. Institute takes efforts in generating awareness about Indian values, personal integrity and civic responsibility (through campaigns like community service/ blood donation drives/ /exhibitions on socially relevant issues/ gender equality, environment and sustainability/ ethics and values etc.)

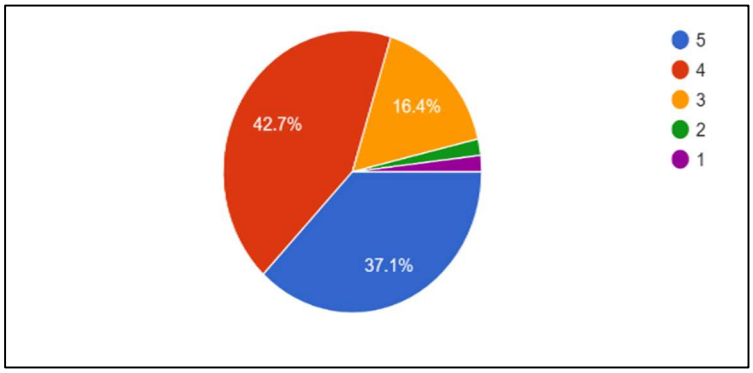


3. Education at SPIT has cultivated consideration for ethical practices, sensitivity for environment

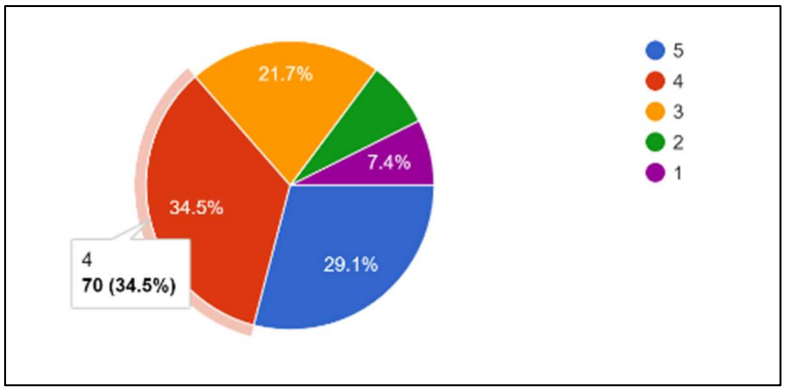


III. College Environment

1. The atmosphere at S.P.I.T is helpful for learning.

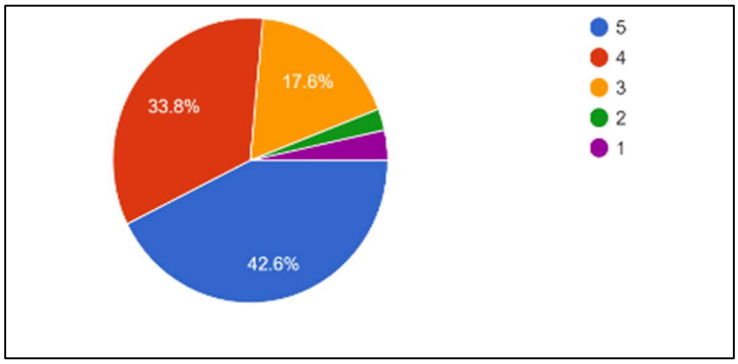


2. Is there a need to improve the general environment in the Institute/Department and attitude of the people?

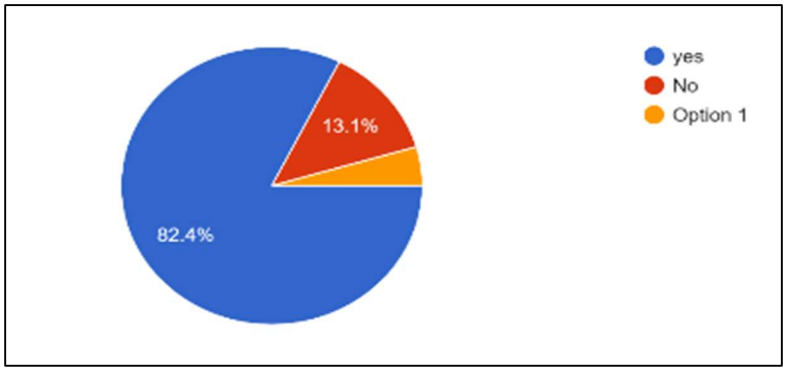


IV. Mentorship

1. Students are motivated to participate in various competitions (such as Hackathons/ trouble-shooting, coding/ethical hacking/ Moot courts for legal aspects/ debates)

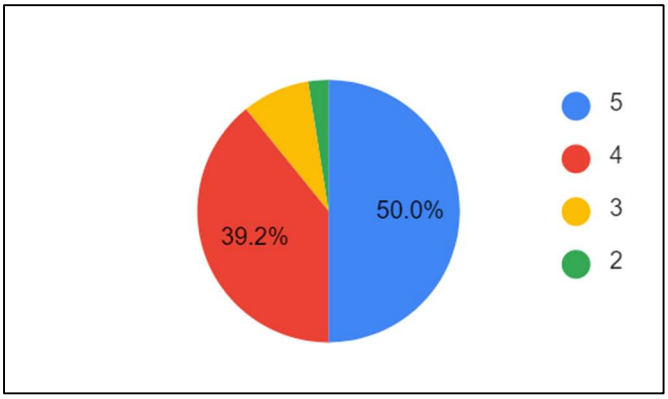


2. Research culture is encouraged (technical paper presentation / publications in journals/ motivation through funding for publications/ competitions / research projects / Faculty serving as research guides)

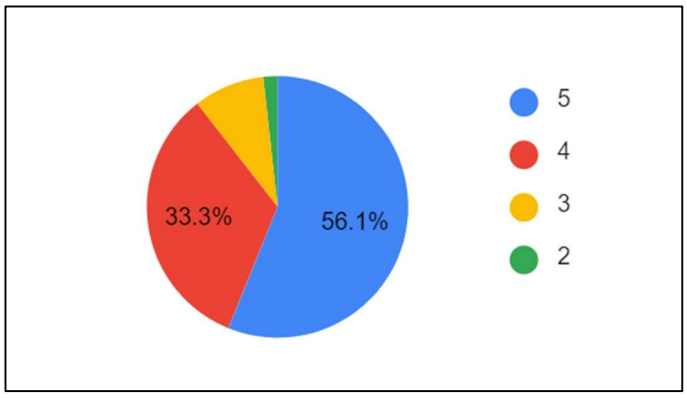


V. Alumni engagement

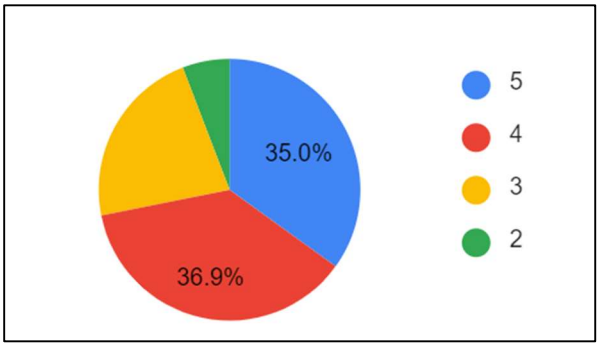
1. Do you feel proud to be associated with S.P.I.T as an Alumnus?



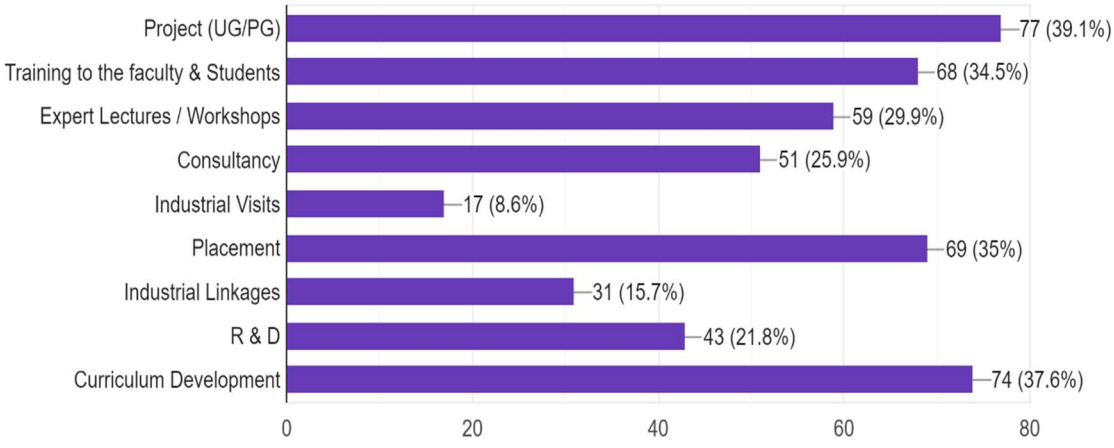
2. I will recommend relative/friends to enroll at SPIT



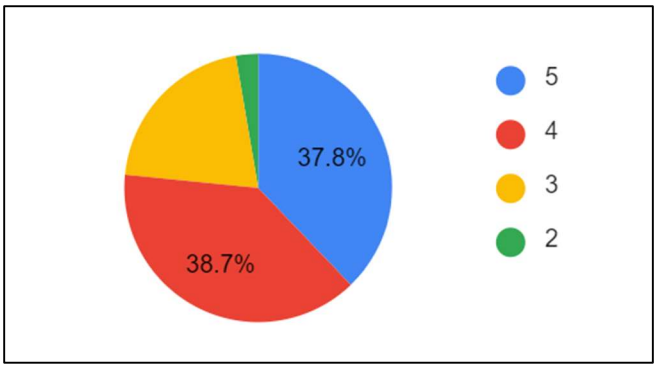
3. There is a need to improve alumni involvement in the development of the institute.



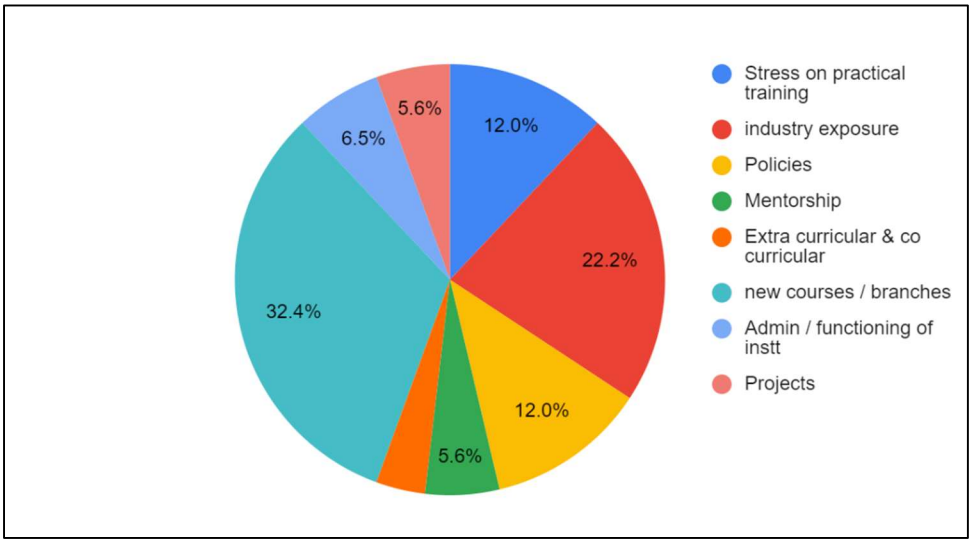
4. In what capacity would you like support institute/department towards academic development?



5. Are you willing to contribute to the development of the institution?



VI. Suggestions for Improvements



Practical Knowledge : Nearly 12% of the respondents have requested greater emphasis on practical training. This includes :

- ✓ hands-on experience with industry development tools, mandatory internships,
- ✓ less theoretical subjects such as DIP
- ✓ more specialised subjects semester 7 onwards like statistical programming.
- ✓ more projects in lab sessions rather than just writing codes and project and assignment based approach by reducing the lecture hours.
- ✓ 6month internship which gives insights into real life problems has proved very useful paving the way for a smooth transition from college to industry.

The overall feedback seems to convey that we should focus on building real life skills which are usable and do away with obsolete subjects.

Industry exposure : A major section of the respondents (~22%) have suggested:

- ✓ greater exposure to industrial norms and environment through industrial visits and internship
- ✓ learning coding practices and standards used in industry
- ✓ newer technologies that are trending or have a potential rather than focusing entirely on curriculum and other formalities.
- ✓ exposure to corporate culture, ethics and social skills

Policies : A significant 12 % of the respondents have also requested for a relook at some of the institute policies. Some of these are :

- ❖ **Attendance** :
  - ✓ Should be liberalised like BITS Pilani.
  - ✓ Students who are capable of managing academics without attending classes should be allowed to do that, so they can focus on other endeavours.
  - ✓ Grades and marks should be less influenced by attendance or other factors and should reflect student's skills.
  - ✓ 50%-75% Attendance during placement semester might help
- ❖ **Academics and Credit requirements:**
  - ✓ Students should be allowed to drop courses in which they are not interested and should also be allowed to choose the professor from whom they want to study
  - ✓ Relative grading system should be adopted
- ❖ **Teaching & learning** :
  - ✓ Each student should be trusted, understood and should be motivated to improve, every student has potential to succeed.
  - ✓ This optimism should be there in every aspect from teaching to placement training. Practicals should be conducted in a way that captures interest of the students.

- ✓ Teachers should be able to identify the merits of students beyond marks scored in subjects. Need to involve higher management more in the teacher - student relationship.
- ✓ Regular training programmes for Faculty

❖ **Research :**

- ✓ There should be an incentive for research and making it mandatory reduces enthusiasm and the quality of work.
- ✓ Extra credits must be offered for research work. Students must be allowed to drive research.
- ✓ Research requires a great deal of expertise that is currently lacking.
- ✓ Simply making research papers compulsory doesn't go a long way.
- ✓ Interested students need better guidance on how to go about doing research in a particular area. This guidance can be outsourced if the expertise isn't available internally.

❖ **College environment** :

- ✓ There should be incentivies for students to create an atmosphere. The more time students spend at college the better the sense of belonging gets and the likelier they are to contribute towards the institution.
- ✓ Students should not be discouraged from taking initiatives that are non academic.
- ✓ If the institute wants to create engineers that are aware citizens it must realise that students should be given freedom to create, cultivate and nurture forums for open discussions.

❖ **Mentorship** :

- ✓ Alumni mentorship with coordination of internal mentors can help in better development through regular alumni meets and sessions for guidance/training
- ✓ Better support for students wishing to go for masters by providing training and guidance
- ✓ More support from SPTBI for entrepreneurial students - Incubation / Investment / Training

- ✓ Mentors from industries to guide students and give them an idea of what kind of work goes on in the industry
- ✓ Support to students taking part in National level competitions academically and financially.
- ✓ Promote more participation towards hackathons

Curriculum Design

Nearly one third of the respondents have expressed their views on curriculum design. There is a view that we need to get aligned with IITs and Foreign Universities for the curriculum structure. Extensive feedback has been summarized below :

- ✓ An exposure on the Business Verticals (FSI, HCLS and so on) which are common in the IT sector
- ✓ Basics of Finance and Accounting : Not transition to industry, but in general a personal finance course would be very beneficial. Teaching about investing in UG would be useful for students so that they start early.
- ✓ More programming languages and Programming related Courses
- ✓ Courses/seminar on SDLC and Security
- ✓ Greater focus on ML, AI, Blockchain, Deep Learning, Data Science, Statistics including practical courses
- ✓ More in-depth knowledge for core subjects like data structures and algorithms
- ✓ Enhanced coding experience.
- ✓ Increase mock interview sessions
- ✓ New technology subjects, better core electronics placements.
- ✓ Hands on Application development. Java and JavaScript Udemy courses
- ✓ Include practical sessions for git, deployment processes on Linux servers, including newer web development technologies in curriculum,
- ✓ Increase Offering of Interdisciplinary subjects. Bringing back ABL activities.
- ✓ MOOC courses can be offered to be completed in Semester breaks there by being alloted credits for. MOOC courses especially related to Programming and Analytics
- ✓ Adding specialization option in third and final year

- ✓ College hours should be reduced to 3-4 hrs per day giving students the time to self learning.
- ✓ Each semester should have a group project activity. This will have an impact on students to co-operate and explore better. "
- ✓ Need to focus on employability / improving skillsets required for placements / attempting for foreign universities.
- ✓ More emphasis on coding for placement
- ✓ Soft skills training has to be consistent. Keeping a subject or two in the final semester leading up to placements will not help.

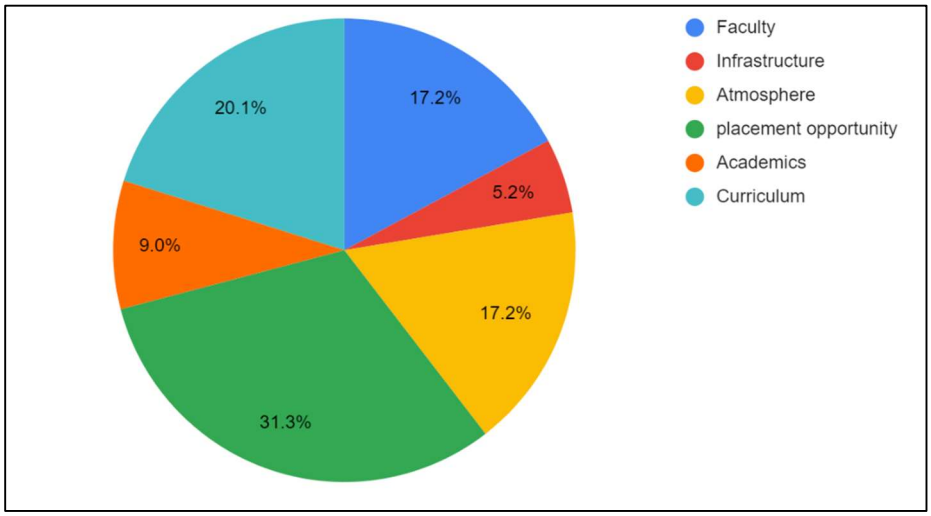
Projects : Specific feedback has also been provided on projects. These include

- ✓ Students can be required to work on Industry - like projects "
- ✓ Greater importance to projects
- ✓ Live projects
- ✓ Better guidance for projects
- ✓ Live Projects of 1 year duration as scope of live projects are large enough which takes time to build
- ✓ More Independent Projects
- ✓ More project & assignment based approach rather than long tiring lectures

Miscellaneous :

- ✓ Digitization and better administration to avoid unnecessary delays in processing of documents etc. Better infrastructure has also been sought in the form of canteens, hostels, maintenance of computers and so on

VII. Strengths

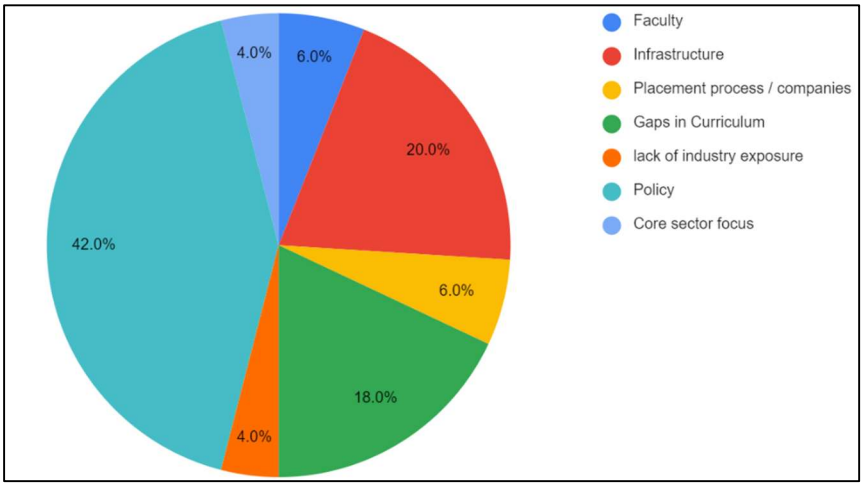


- **Faculty** : 17% of the respondents have stated the faculty of S.P.I.T as its greatest strength. The experience faculty and their interaction with students has been acknowledged in the feedback
- **College Environment** : Another 17% of the respondents have cited the atmosphere at S.P.I.T to be excellent for learning with a very good peer group, of students who are socially responsible, and a very good relationship between seniors and juniors. The institute' atmosphere is very conducive to learning and the institute is also supportive towards student growth
- **Placement Opportunities** : the biggest strength of the institute is the excellent placement opportunities according to nearly one third of the respondents. Placements at top MNCs, students going to top universities for higher studies with the institute bridging the gap between academics and industry as well as preparing the students for higher studies have been cited as some of the contributing factors
- **Curriculum** : 20% of the respondents have given a big thumbs up for the curriculum at S.P.I.T. Some of the highlights are summarized below :
    - ✓ Encouragement towards patents / papers and additional projects / scope courses
    - ✓ Activities like ABL , trouble shooting competition etc "
    - ✓ Scope and Extra curricular courses
    - ✓ Real Life Practical Subjects

- ✓ Very good curriculum for each subject
- ✓ Cognizant of the industry and it's requirements & thus designs curriculum.
- ✓ Great collaborations specially with premier institutions (SPJIMR)
- ✓ Project approach
- ✓ Autonomous Institution
- ✓ Better and Up to date curriculum
- ✓ Focus on Academic and Practical Education , Industry Relevance , Involvement of SCOPE courses to supplement academics instead of conventional academic ones, Encouraging and Supportive Professors , Extra curricular activities like ABL , Yoga , Design thinking
- ✓ Exposure to various competitions
- ✓ Upto date with new technologies"
- ✓ Last semester Internship for category 1 students.
- ✓ The Scope program helped gain wider perspective both in terms of advanced development as well as additional fields like finance (tie up with SPJIMR).

❖ **Other strengths** that have been highlighted include infrastructure related like classrooms, computer labs, good laboratories, library facilities, best practices in academics with all rules and regulations being followed and so on.

VIII. Weaknesses



- Policies :The biggest chunk of responses on the weakness front is the one related to institute policy on variety of issues. These are highlighted below :
    - ✓ Attendance rules seem to be a major source of dissatisfaction amongst students. Compulsory attendance even during placement times should be avoided. It is felt that there is too much focus on submissions, documentation and other formalities.
    - ✓ Frequent internal assessments don't leave much room for personal learning through online platforms."
    - ✓ Giving too much importance to some rules which are not that significant such as mandatory attendance
    - ✓ Grievances related to any matter are not handled properly. Office and examination staff is very stubborn. Curriculum is advanced however jobs are not offered for core Electronics jobs.
    - ✓ Extra curricular activities are not given much priority due to attendance related issues
    - ✓ College refund policies for NPTEL and other MOOC courses is not regulated properly"
    - ✓ Tedious processes for submissions. Can be easily automated using technology.
    - ✓ Changing rules & regulations
    - ✓ General management and planning especially when introducing newer changes to curriculum and program
    - ✓ The students should be provided with better assistance in selecting final year project topics as well as ensuring industrial level development is done. Otherwise the project is just treated as a part of curriculum and nothing new is learnt from it.
- **Gaps in curriculum**
    - ✓ Curriculum focuses too much on marks and not enough on co-curricular activities like hackathons or competitive coding
    - ✓ Less/No importance on Data structures and algorithms for non Computer branches. (DSA is a standard topic, a must for software companies)
    - ✓ No encouragement for students to use open source technologies.

- **Miscellaneous** :
  - ✓ Other miscellaneous feedback on weaknesses include lack of support from support staff, office staff and infrastructure issues like lack of hostel facilities and canteen facilities.
  - ✓ More preparation for placement process is being sought and students have also complained about the lack of companies from the core sector in the placement process.

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