



#### TO WHOMSOEVER IT MAY CONCERN

This is inform to all the stake holders of the institute that, we have collected, analysed and action taken on feedback 2020-21 on curriculum of Bioengineering Degree programs offered by our MIT School of Bioengineering from Students, Faculties ,alumni and Employers. We are providing the analysis of feedback for the academic year 2020-21 for your information. Thanks for your cooperation in providing feedback and supporting to improve our students skills/knowledge globally.

.





# Analysis of feedback forms





#### **Analysis of Feedback with Graphical Representation**

#### A] Students

#### I. Details of number of students and responses obtained program wise

Total number of students enrolled in B. Tech	253
Total number of feedback obtained	135

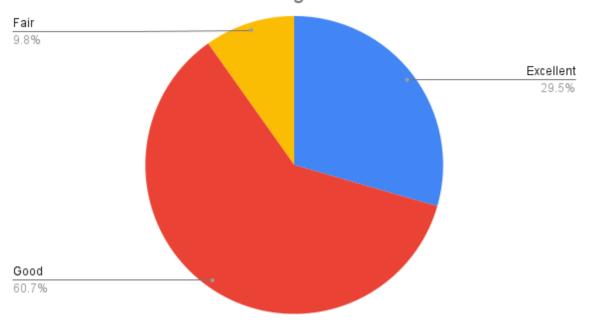
Total number of students enrolled in Integrated M. Tech	110
Total number of feedback obtained	58



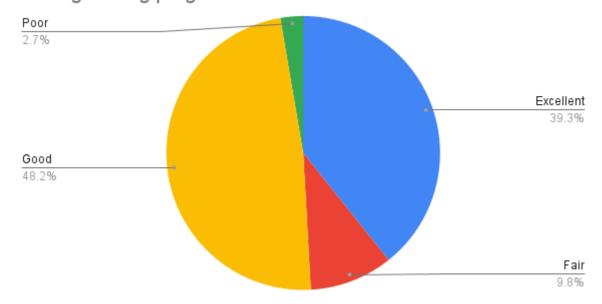


#### Feedback analysis for B. Tech Bioengineering program

#### Count of Overall curriculum rating



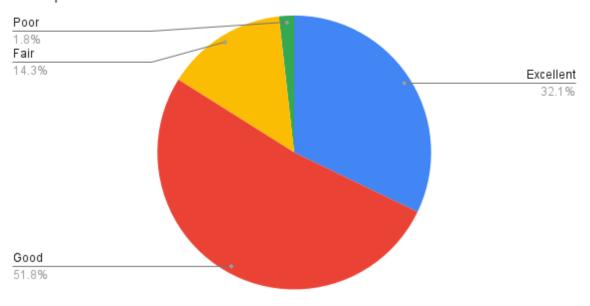
Count of Curriculum offered has made me interest in the Bioengineering program.







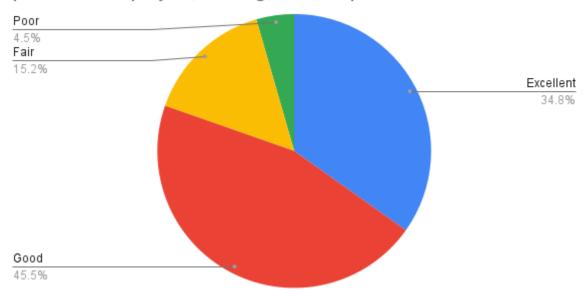
# Count of The curriculum includes Latest Development/Research Component.







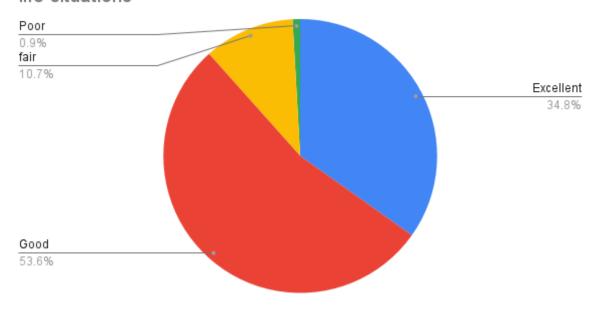
Count of Curriculum has right balance between the theory, practical and project, training, internship.



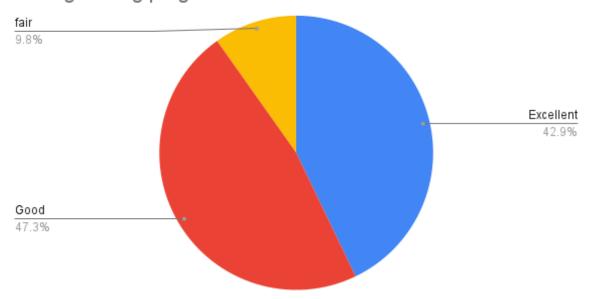




## Count of The curriculum is well structured and relevant to real life situations



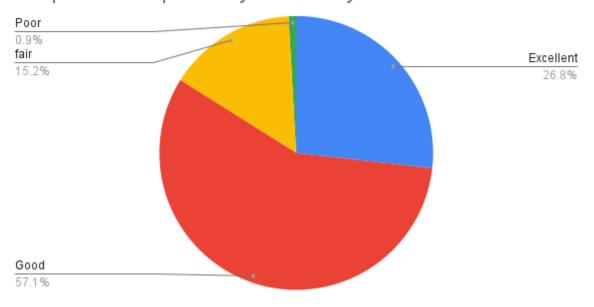
Count of Rate the structure of the curriculum designed for the Bioengineering program.



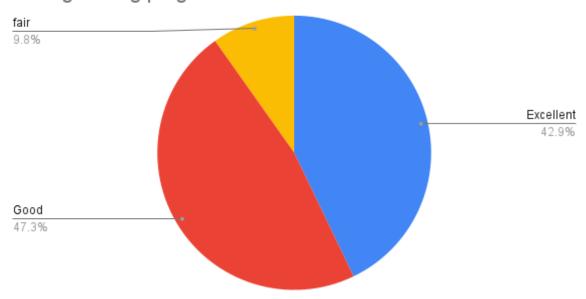




Count of Rate the depth of the curriculum offered in terms of the competencies expected by the industry.



Count of Rate the structure of the curriculum designed for the Bioengineering program.

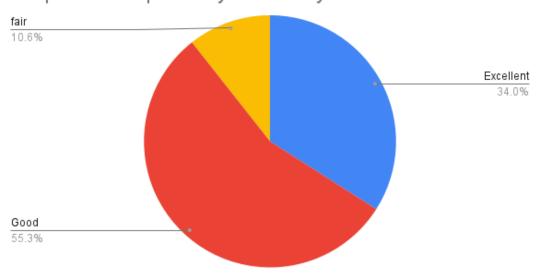




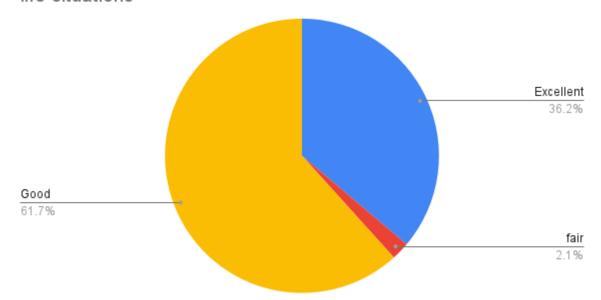


# Feedback analysis for Integrated Master of Technology Bioengineering program

Count of Rate the depth of the curriculum offered in terms of the competencies expected by the industry.



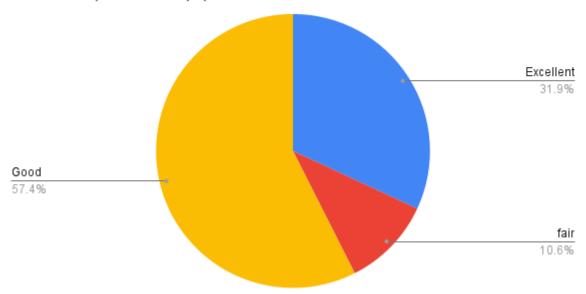
Count of The curriculum is well structured and relevant to real life situations



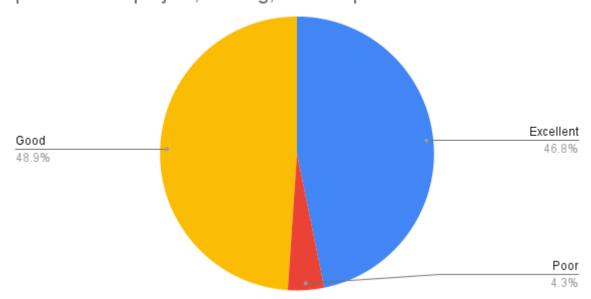




Count of How do you find the curriculum from the employability, and entrepreneurship point of view?



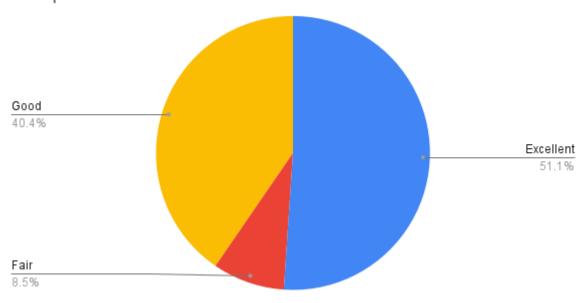
Count of Curriculum has right balance between the theory, practical and project, training, internship.



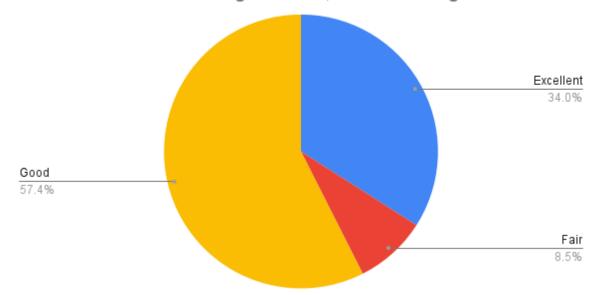




Count of The curriculum includes Latest Development/Research Component.



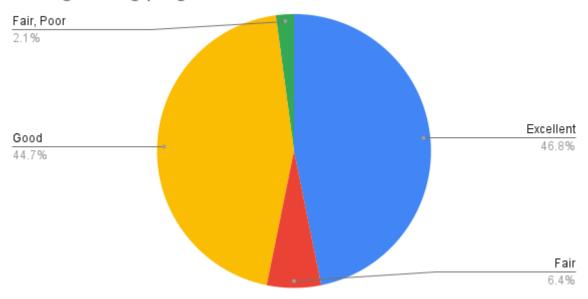
Count of What is the standard of the curriculum taught? Rate the curriculum considering the local, national and global needs?



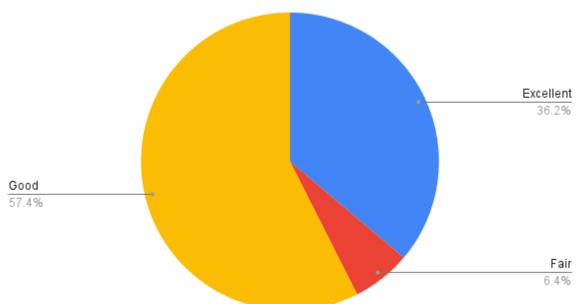




# Count of Curriculum offered has made me interest in the Bioengineering program.



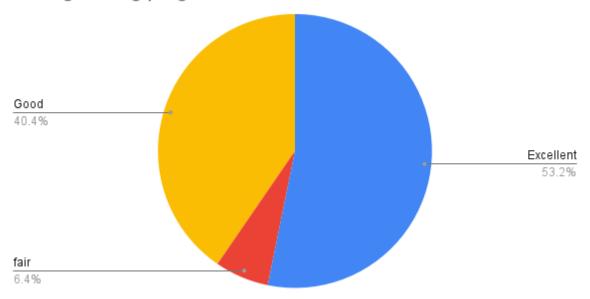
#### Count of Overall curriculum rating







Count of Rate the structure of the curriculum designed for the Bioengineering program.

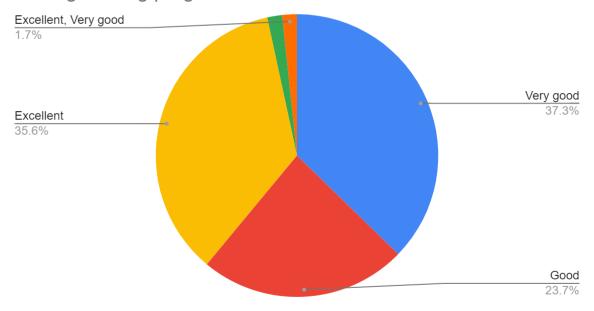


Feedback analysis for Integrated M. Tech Bioengineering program

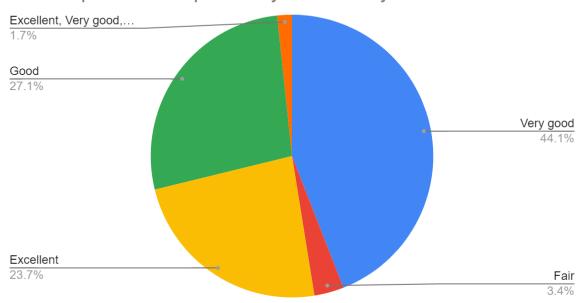




Count of Rate the structure of the curriculum designed for the Bioengineering program.



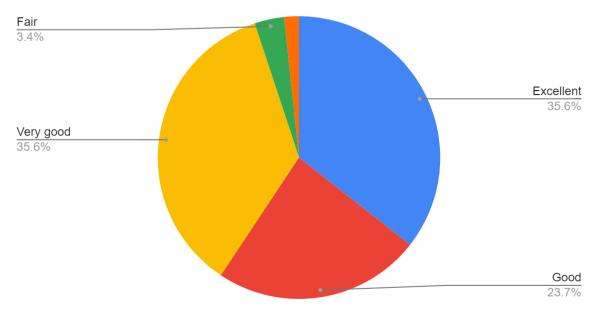
Count of Rate the depth of the curriculum offered in terms of the competencies expected by the industry.







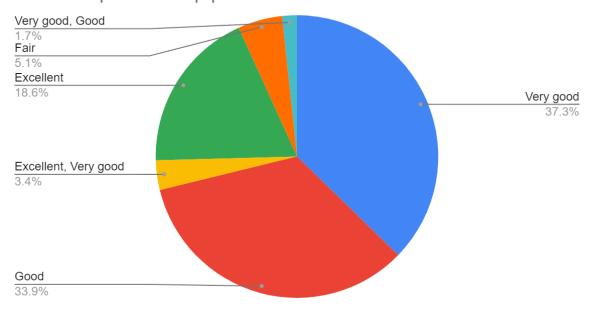
Count of The curriculum is well structured and relevant to real life situations



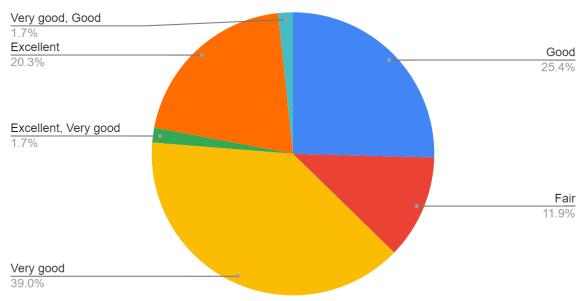




Count of How do you find the curriculum from the employability, and entrepreneurship point of view ?



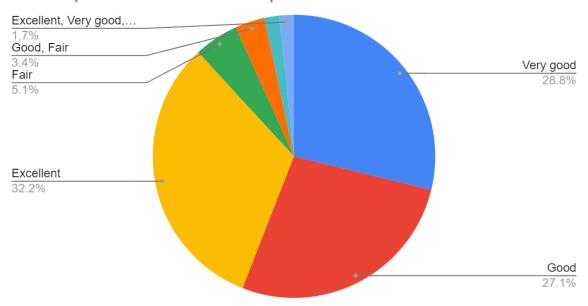
Count of Curriculum has right balance between the theory, practical and project, training, internship.



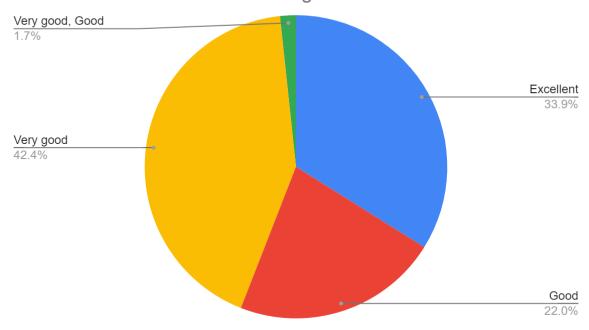




## Count of The curriculum includes Latest Development/Research Component.



#### Count of Overall curriculum rating







Major themes identified				
Major themes that highlight the strength of the curriculum	Major themes that focus on the scope of improvement			
<ul> <li>Globally competent syllabus in the field of bioengineering.</li> <li>Multidisciplinary courses included for better employment and career.</li> <li>Project based learning methods included.</li> <li>Advanced courses included in curriculum</li> </ul>	<ul> <li>Incorporation of contemporary programming languages in the curriculum.</li> <li>More practical's can be added in the advanced courses</li> </ul>			





# **Teachers**

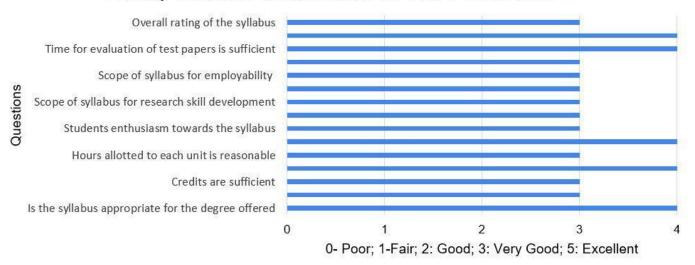




#### **B**] Teachers

Feedback from every teacher has been taken for the course they have taught and the average score for each question has been plotted as given below.

#### Faculty feedback on curriculum for the AY 2020-2021







# Alumni





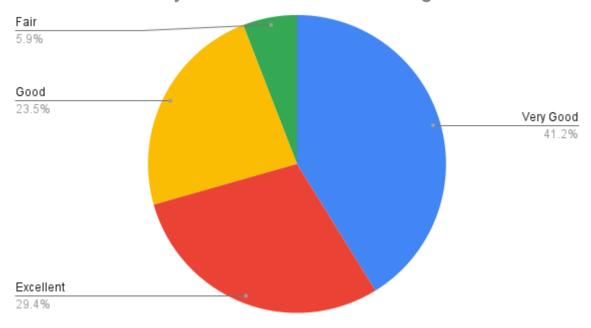
#### Alumni

Feedback analysis for alumni

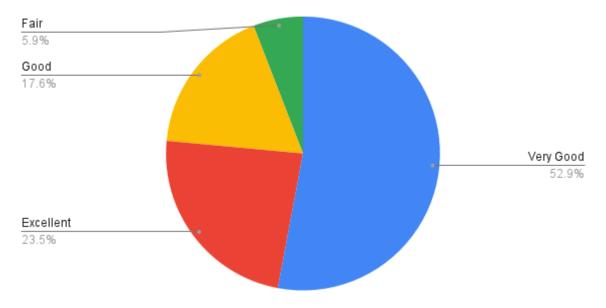




Count of 1. The syllabus is suitable for the Degree chosen



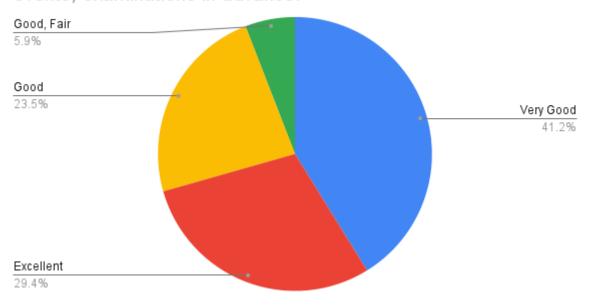
Count of 2. Aims and objectives defined in each course are suitable.



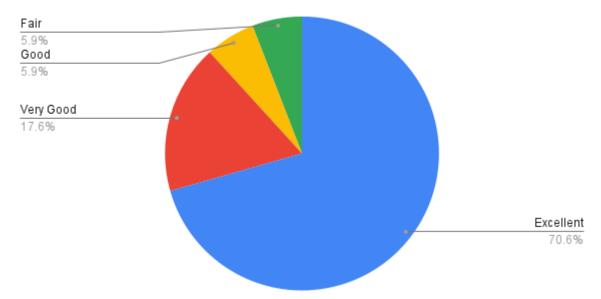




Count of 3. Students get notices and circulars regarding the events, examinations in advance.



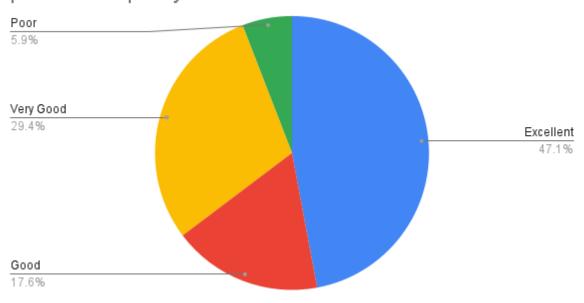
Count of 4. Get chance to discuss about topics with subject teacher.



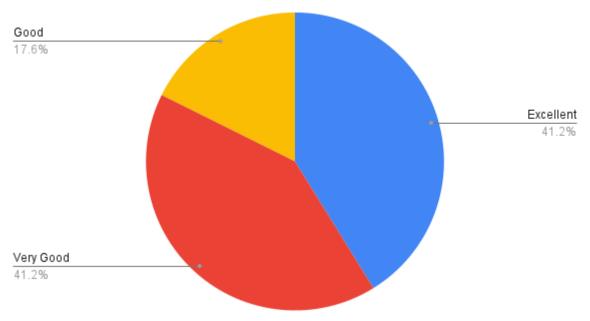




Count of 5. You get opportunity to participate and conduct practicals as per syllabus



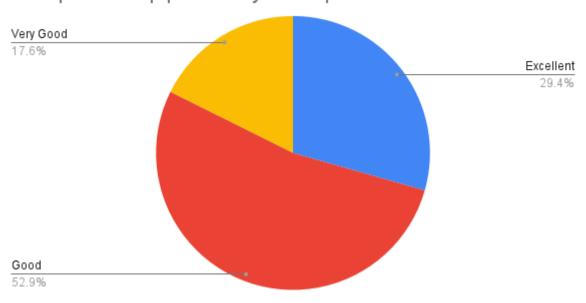
Count of 6. Opportunity to do in house projects



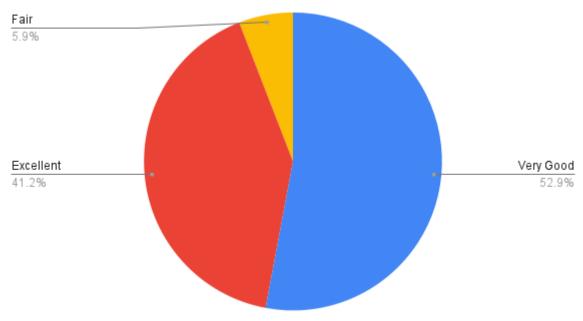




Count of 7. Scope of skill development/ Entrepreneurship/personality development



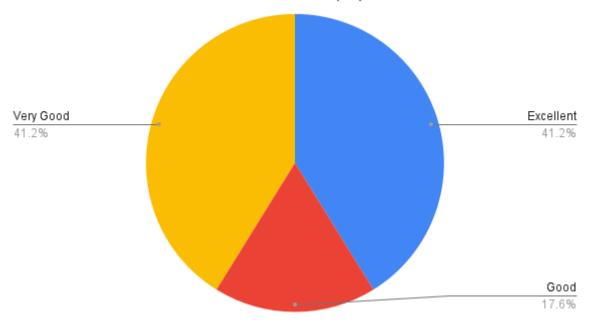
Count of 8. Time given by faculty to discuss the topics/doubt



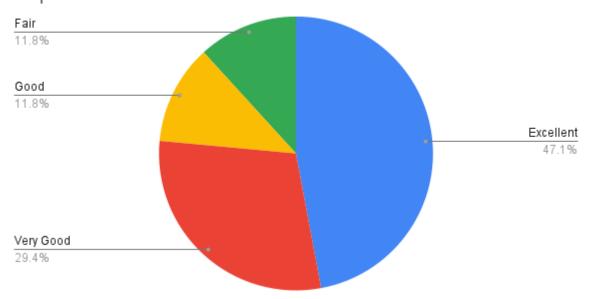




Count of 9. Fairness of examination paper evaluation



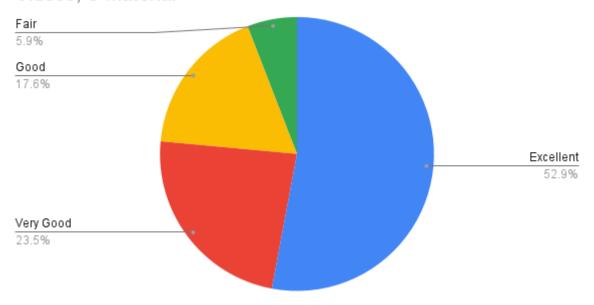
Count of 10. Discussion on examination answer papers if required



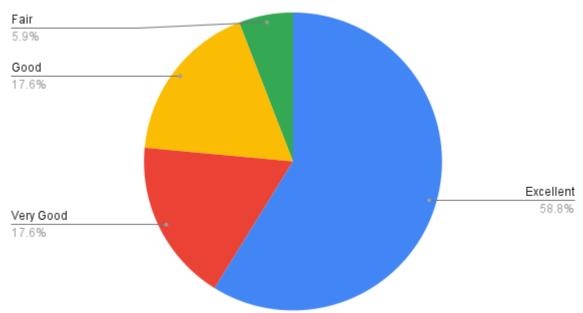




Count of 11. Use of ICT facilities to teach the subject – PPT, Videos, e-material



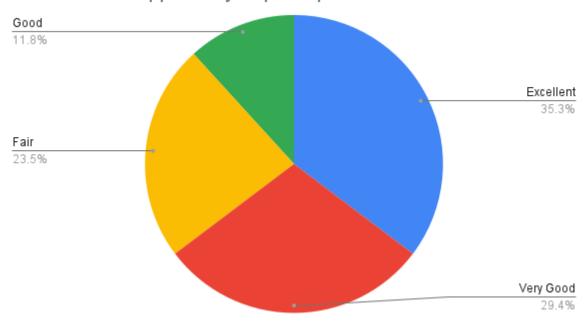
Count of 12. Doubts clarification by concern teacher



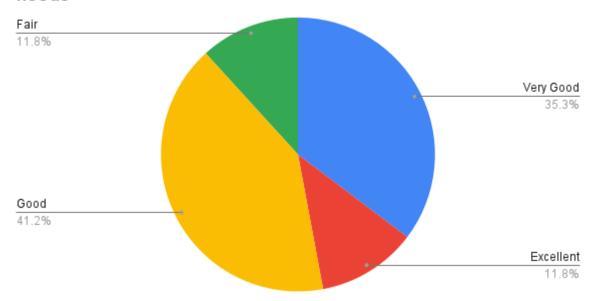




Count of 13. Opportunity to participate various clubs



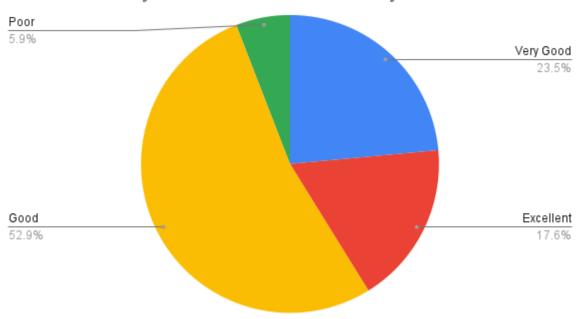
Count of 14. Syllabus is updated as per nation/international needs



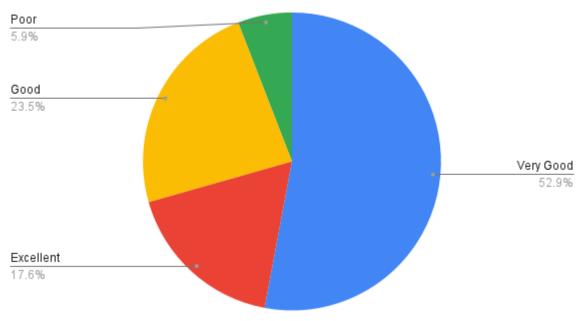




Count of 15. Syllabus is suitable for industry needs



Count of 16. Overall rating on syllabus







#### 17. Suggestions to improve the syllabus in the Degree course

- 1) some courses related to design software should include in the syllabus, also chapter related to standards, regulatory affairs, about CE marking should include in the curriculum.
- 2) No improvements needed
- 3) No suggestions
- 4) More practical should be conducted.
- 5) Add more Database administration courses, and some value added courses such as PowerBi, HDFS, expand the syllabus on ML/AI and it's applications.
- 6) Updating on hands on techniques as per recent trends going in industry
- 7) Add regulatory modules for medical devices
- 8) Bioinformatics faculty should improve from 1st year itself and practically it should be performed each time while explaining. Only biotech faculty is nice, biomed is ok, and regular but this is not same for bioinfo. We didn't got hands on for most of the linux related and other bioinfo practicals
- 9) One best thing which you can use is providing handouts prior to each class which provides the learning objectives and MCQs for that lecture and making sure everyone completes it and hands it over (can be used to calculate as internal marks). Another good thing would be to give students a chance to lecture the teacher on a certain topic and assessing them upon the research they conduct upon the topic and presentation skills, this way student will benefit a lot and the professors sometimes get educated on the topic they didn't discover. One last thing would be, asking students to stick to the deadline as it would help them a lot when they go for their higher studies.
- 10) Practice for the practicals is required.

C] Alumni Employer

Not Applicable





# Comparison of Feedback of different Stakeholders & Pertinent Pointers









#### 2. Comparison of Feedback of different Stakeholders

There are various points in the feedback collected from stakeholders like Students, Employees and alumni. Rate out of 5

S.No	Description	Students	Employees	Alumni
1	Overall Rating	4	4	4

#### 3. Pertinent pointers identified & drawn to enhance the learning effectiveness

The feedback from various stockholders was collected and analysed. Later few pointers found to be improved in the curriculum of B. Tech. Bioengineering and Int. M. Tech. Bioengineering Degree courses.

- 1. Curriculum theory and Units distribution to be enhanced.
- 2. Discussion on examination papers can be carried out by faculty members after checking the papers.
- 3. Students have not received notices and circulars in advance so it can also be improved by using TCSion.
- 4. To include more practicals can be incorporated by pointing out the need of Industry and Research fields.
- 5. Remedial and Bridge courses required as per students requirement. It can be implemented after BOS meetings.

#### 5. Basis of Planning the Revision or Updating the Syllabus based on the Feedback

The feedback is collected from various stakeholders and analysed. Later, a faculty meeting is organized to incorporate the modification of syllabus with consultation of subject teachers. The modified syllabus is kept for approval from BOS, if any suggestion from BOS members will be incorporated in the syllabus. After passing through BOS, the syllabus forwarded to the Academic Council for approval.

#### 6. Action Taken and Improvement or Enrichment in the Curriculum

The stakeholders feedback will be taken into consideration to improve the curriculum in upcoming Faculty meetings, BOS and Academic Council.

#### 7. Conclusion

The feedback for all the stakeholders were collected and analysed in a lucid manner. Overall rating of the curriculum is satisfactory but still needs improvement. The modification of curriculum will be done after consultation with faculty members, Industry people and subject experts.