

Indian Institute of Technology Jodhpur

Department of <u>Biological Sciences and</u>

Bioengineering (BSBE)

Review Period: July 2015 to 31 July 2022

Evaluation Sheet for Internal Review of the department

Committee Members

- 1. Prof. V. Nagaraja, IISc Bangalore
- 2. Dr. Sharmila Mande, TCS Pune
- 3. Prof. Dhirendra S. Katti, IIT Kanpur

Committee may provide a single combined report.

Note:

- 1. In column 2, please provide description of the committee's assessment.
- 2. In column 3, Please choose one of the progress indicators from the below

Excellent

Very good

Good

Average

Below Average

Due to the nature of some specific questions, it may not require any progress indicator.

- 3. Please use additional pages if required.
- 4. Please sign on every page and submit to the Director IIT Jodhpur

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Sr. No	Item	Evaluation
1.	Opinion and suggestions about the curriculum of different academic programs (B.Tech/M.Sc/M.Tech) offered by the department and their relevance	Very Good
	The overall curriculum of all programs (B.Tech., M.Tech., Ph.D.) is fine. A few recommendations are as follows:	
	 Optimize timetable for improving access to more courses. The introduction to bioengineering course should emphasize with examples - the overlap between all disciplines of engineering and biology and explicitly state that these are the frontier areas of research for most engineering departments. This will enable young students to get an orientation for the contextual importance of biology/bioengineering. 	
2.	Comments about the teaching learning process adopted by the department. Your suggestions and advice for the same Some of the faculty are doing an excellent job about their teaching and pedagogy. Whereas others are doing a very good job with outreach. This culture should be nurtured and maintained.	Very Good
3.	Provide your overall evaluation about outcome of the programmes and performance of the graduated students in the profession. Any suggestions will be welcome	Very Good
	Too early to assess to get an overall picture of the UG program. The graduated M.Tech. and Ph.D. students seem to be doing well.	
4.	Provide your assessment about the doctoral programmes (PhD & MTech-PhD) of the department. Please indicate your suggestions for improving the same.	Very good
	Seems to be doing very good. A suggestion for the faculty is to introduce departmental seminars (journal, work or other) for Ph.D. students. This can be compulsory but need not be graded or have credits.	
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5.	Your feedback about laboratory facilities including research infrastructure and facilities in the department	Very Good
	 Good infrastructure. However, there is a scope for improvement for enhancing the research output. The following facilities can be considered as they have a direct bearing on the research performance of multiple faculty members: 1. High end microscopy facility (eg. Confocal Microscope) 2. X-Ray diffraction facility 	
6.	Provide committee's assessment of academic research of the department. In particular, provide your input about (i) Quality of the research activities pursued by the department, (ii) Number and quality of publications Your suggestions and advice will be of immense value(i)Commendable quality of ongoing research (ii) Number is good. Quality – there is a scope for improvement.	Very Good
7.	Provide committee's assessment of different sponsored research and consultancies undertaken by the departmental faculty members.Sponsored Research: It is desirable that every PI brings in extramural grants to strengthen their own research as well as the department/Institute.Consultancy: Yet to be initiated.	Very Good
6.	 Provide committee's assessment of industry interface and industry linked research activities by the department. A good beginning has been made, however, this is an avenue where there is a lot of scope for improvement. 	Average
7.	 Provide committee's assessment about outreach, continuing education/executive education programmes of the department. Please indicate committee's suggestions for improving the same. We appreciated the departments outreach activity by some of the faculty. This is an area where further efforts can be made by increasing faculty participation at large. Mande Mande 	Good

8	Please indicate committee's assessment about the departments linkage with the peer groups in the country and abroad. Please assess the extent of inter-disciplinary connect with other departments in the institute. Committees suggestions for improvement in these aspects will be of immense value The department is doing very well in terms for inter-departmental and external collaborations. However, intra-departmental collaborations can be strengthened.	Very Good
9.	 Provide committees assessment about faculty of the department: Coverage of different areas of relevance for the department in the faculty Quality of the faculty of the department Suggestions about the areas for future growth of faculty strength will be highly appreciated. Coverage of different area is good. However, the department needs to consolidate and grow on their existing strengths and not draw themselves thin for want of diversification. 	Very Good
9.	 Quality of the faculty is very good. Faculty with engineering undergraduate degrees who have moved into the biology/bioengineering space during their Ph.D. or Post-doctoral tenure need to be hired. This will bring in a new flavour much needed in the department. Based on Vision, Mission and Goals identified by the department comment about the committee's overall assessment of the	Very Good
	progress made so far. The vision should be to nurture and strengthen the existing areas of expertise and bring in only a few diversifications which will bring connectivity to the existing strength, instead of additional diversification.	
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10.	Overall assessment by the committee and suggestions	Very Good
	 Overall, this committee felt that the review process was very rushed. Suggestions: The time allocated should have been much longer to enable better interaction with all stake holders (eg. 1.5-2 days). The increased duration would have enabled: Opportunity for each faculty member to present his/her research work (10-15 mins). The committee to review the various facilities in greater detail. An opportunity to meet with PIs from other departments involved in the interdisciplinary 	
	research that is ongoing in the BSBE department. Faculty with engineering degrees at the bachelors' level who have moved into the biology/bioengineering space need to be hired. Such recruitment can add a much-needed new flavour to the department.	
	There is a need to enhance/strengthen the bioengineering aspect of the department. Currently, the department has underrepresentation of the discipline compared to the core biological sciences topics.	
11.	Any other aspect committee wish to note/highlight	
	None	

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