Indian Institute of Technology Kanpur

Knowledge Incubation for TEQIP
Faculty Induction Program
Group A: January 20-24, 2018
Group B: January 29 – February 2, 2018
Group C: February 9-13, 2018

Coordinator: Prof. C.S Upadhyay
Faculty Induction Program
January 20-24, 2018

Faculty Induction Program
January 29 - February 02, 2018
Faculty Induction Program
February 09-13, 2018

More Pictures:  Group A
              Group B
              Group C
About the Program

Knowledge Incubation for TEQIP, IIT Kanpur organized 5 day Faculty Induction Program at IIT Kanpur. Around 250 newly recruited teachers from 18 engineering colleges from UP, Bihar, J&K, MP and Uttarakhand spanning several departments including Humanities, Physics, Mathematics, Mechanical Engineering, Civil Engineering etc. attended the program to learn from experts at IIT Kanpur about various aspects of teaching and learning. The Induction Program’s primary goal was to familiarize the participants with their roles as teachers. It was designed to orient them on various generic aspects of teaching learning, instructional methodologies, and assessment and evaluation techniques. The curriculum consisted of three modules Pedagogy, Research, and knowing the TEQIP III project. More than 100 IIT Kanpur faculty and staff from different departments came together to make this initiative a big success.

The 5-day event was organized in batches with 100 participants each. Two of these batches had 100 participants each and the third batch had 50. Day 1 focused on curriculum constituents, academic structure of IIT to evaluate lectures and course monitoring, MOOCs, classroom paradigms etc. The second day focused on science and engineering core where IIT Kanpur faculty showed the participants how to prepare for...
lectures for various courses where topics ranged from physics, mathematics, electrical and electronics engineering etc. to material science, fluid and solid mechanics. On the third day the group was divided according to their departments and visits were arranged to respective departments for closer interactions with faculty. These also included lecture on departmental core teaching strategies. On day four lab visits were organized to show them different laboratories at IIT Kanpur. These tours included physics, chemistry, tinkering lab, central workshop etc. Day 5 included discussions on UG program, B. Tech. Project, faculty improvement, how to engage UG students and a session with NPIU that explained about TEQIP III reforms.

As mentors we need to keep them motivated to evolve their teaching and research. We need to keep them involved in several activities through which they gain confidence and have a better understanding of their role as an educator. Some the following activities that can be beneficial for them:

- Long/short term visits at IIT Kanpur to work with/under experts.
- Teaching workshops
- MOOCs on topics relevant to engineering education.
- Training on how to generate new learning materials.
- Course on research methodologies
- Course on technical reading and writing
LIST of SPEAKERS

1. Prof. A. R Harish
2. Prof. Abhas Singh
3. Prof. Achla M Raina
4. Prof. Adrish Bannerjee
5. Prof. Aloke Dutta
6. Prof. Anurag Gupta
7. Prof. Animesh Das
8. Prof. Anindya Chatterjee
9. Prof. Anupam Saxena
10. Prof. Prem Medhekar
11. Prof. Pramod K. Kharpe
12. Prof. Pratap Jadhav
13. Prof. Praveen S. Patil
14. Prof. Praveen S. Patil
15. Prof. Prof. S. Sundar Kumar Iyer
16. Prof. B. Panda
17. Prof. Bhaskar Dasgupta
18. Prof. C S Upadhyay
19. Prof. D L V K Prasad
20. Prof. Debadatta Mishra
21. Prof. Deepak Gupta
22. Prof. Dheeraj Sanghi
23. Prof. Durgesh C. Rai
24. Prof. G Anantharaman
25. Prof. Gautam Deo
26. Prof. Ishan Sharma
27. Prof. J K Bera
28. Prof. K S Venkatesh
29. Prof. K. Muralidhar
30. Prof. M L N Rao
31. Prof. M K Harbola
32. Prof. M L N Rao
33. Prof. Malay K Das
34. Prof. Mohit Law
35. Prof. Nihar Ranjan Patra
36. Prof. Niraj Sinha
37. Prof. Onkar Dikshit
38. Prof. P Sensarma
39. Prof. Pankaj Wahi
40. Prof. Prakash M Dixit
41. Prof. R K Ghosh
42. Prof. R P Rave
43. Prof. Ragunath Tewari
44. Prof. Rajeev Gupta
45. Prof. Rajesh Hegde
46. Prof. Rajesh Srivastava
47. Mrs. Revathy K. T
48. Prof. S Sundar Kumar Iyer
49. Prof. S R Chaudhuri
50. Prof. Saikat Chakrabory
51. Prof. Sameer Khandekar
52. Prof. Sandeep Anand
53. Prof. Santanu Misra
54. Prof. Shashank Shekhar
55. Prof. Shivam Tripathi
56. Prof. Shyama Prasad Das
57. Prof. Subhajit Roy
58. Prof. Sudib K Mishra
59. Prof. Sudib Kumar Mishra
60. Prof. Surender Baswana
61. Prof. T V Prabhakar
62. Prof. T MuthuKumar
63. Prof. V Shankar
64. Prof. V K Yadav
65. Prof. Vinod Tare
66. Prof. Y N Singh
## SCHEDULE

### Group A: January 20-24, 2018

**Day-1, January 20, Saturday: General principles**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 – 9:30 AM</td>
<td>Registration</td>
<td></td>
</tr>
<tr>
<td>9:30 – 10:15 AM</td>
<td>Welcome Talk - Generic curriculum and its constituents</td>
<td>Prof. C. S Upadhyay</td>
</tr>
<tr>
<td>10:15 – 10:30 AM</td>
<td>High Tea</td>
<td></td>
</tr>
<tr>
<td>10:30 – 11:00</td>
<td>Presentation on Academic Structure at IITK</td>
<td>Prof. Rajeev Gupta</td>
</tr>
<tr>
<td>11:00 – 11:30</td>
<td>What to test for? Learning evaluation through quizzes, exams, projects.</td>
<td>Prof. Manoj K. Harbola</td>
</tr>
<tr>
<td>11:30 – 12:30</td>
<td>MOOCS, Flipped Classroom paradigms</td>
<td>Prof. T.V Prabhakar</td>
</tr>
<tr>
<td>1:00 – 2:00 PM</td>
<td>Lunch Break</td>
<td></td>
</tr>
<tr>
<td>2:00 – 2:30 PM</td>
<td>Bringing Engineering Drawing to Life – an interaction</td>
<td>Prof. A. Saxena</td>
</tr>
<tr>
<td>2:30 – 3:00 PM</td>
<td>Course monitoring mechanism at IITK</td>
<td>Prof. C.S Upadhyay / Prof. R Gupta</td>
</tr>
<tr>
<td>3:00 – 4:00 PM</td>
<td>How to prepare for a course?</td>
<td>Prof. S. Baswana</td>
</tr>
<tr>
<td>4:00 – 5:00 PM</td>
<td>Experiences with Brihaspati as a teaching management system</td>
<td>Prof. YN Singh</td>
</tr>
<tr>
<td>5:00 – 5:15 PM</td>
<td>Importance of the HSS component of teaching</td>
<td>Prof. Achla Raina</td>
</tr>
</tbody>
</table>
### Day-2, January 21, Sunday: Science Core

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 – 11:10</td>
<td>Core Physics – objectives, content, preparation, delivery, expectation</td>
</tr>
<tr>
<td></td>
<td><em>Prof. MK Harbola</em></td>
</tr>
<tr>
<td>11:15 – 11:30</td>
<td>Tea Break</td>
</tr>
<tr>
<td>11:30 – 12:30</td>
<td>Core mathematics – objectives, content, preparation, delivery, expectation</td>
</tr>
<tr>
<td></td>
<td><em>Dr. MuthuKumar</em></td>
</tr>
<tr>
<td>12:30 – 1:00</td>
<td>Need for simple experimentation in classroom teaching</td>
</tr>
<tr>
<td></td>
<td><em>Prof. C.S Upadhyay</em></td>
</tr>
<tr>
<td>1:00 – 2:30 PM</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>2:30 – 3:10 PM</td>
<td>Teaching of Fluid Mechanics</td>
</tr>
<tr>
<td></td>
<td><em>Dr. Debopam Das</em></td>
</tr>
<tr>
<td>3:15 – 3:45 PM</td>
<td>Teaching of Dynamics</td>
</tr>
<tr>
<td></td>
<td><em>Prof. Ishan Sharma</em></td>
</tr>
<tr>
<td>3:45 – 4:45 PM</td>
<td>Overcoming functional English deficiency – Introduction to EPP</td>
</tr>
<tr>
<td></td>
<td><em>Prof Bhaskar Dasgupta</em></td>
</tr>
<tr>
<td>4:15-4:45 PM</td>
<td>Introduction to Electronics</td>
</tr>
<tr>
<td></td>
<td><em>Prof. B. Mazhari</em></td>
</tr>
<tr>
<td></td>
<td><em>Prof. S. P Das</em></td>
</tr>
<tr>
<td>5:15 – 5:45 PM</td>
<td>Material Science in UG education</td>
</tr>
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<td></td>
<td><em>Prof. Ashish Garg</em></td>
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</tbody>
</table>

### Day-3, January 22, Monday: Departmental core

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 – 10:30 AM</td>
<td>Introduction to department – objectives, emphasis, course template, break-up of theory and lab. component</td>
</tr>
<tr>
<td>10:30 – 1:00 PM</td>
<td><em>Session on department core – major theory courses</em></td>
</tr>
<tr>
<td>1:00 – 2:00 PM</td>
<td>Lunch</td>
</tr>
<tr>
<td>2:00 – 5:00 PM</td>
<td><em>Session on department core – major lab. courses, including concept of lab. lecture.; visit to labs.</em></td>
</tr>
</tbody>
</table>
### Day-4, January 23, Tuesday: Lab. Visits

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 – 1:00</td>
<td>Visit to Science Core Labs</td>
</tr>
<tr>
<td>1:00 – 2:00 PM</td>
<td><strong>Lunch Break</strong></td>
</tr>
<tr>
<td>2:00 – 4:00 PM</td>
<td>Tinkering lab &lt;br&gt; <em>Prof. Sameer Khandekar</em></td>
</tr>
<tr>
<td>4:00 – 5:00 PM</td>
<td><strong>Tea Break</strong></td>
</tr>
<tr>
<td>4:15 – 5:30 PM</td>
<td>Discussion on UG research/BTP and engaging the UG students &lt;br&gt; <em>Prof. C.S Upadhyay, Prof. Shakti Gupta, Prof. Debopam Das</em></td>
</tr>
</tbody>
</table>

### Day-5, January 24, Wednesday: Research methodologies

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 – 10:30 AM</td>
<td>About TEQIP III &lt;br&gt; <em>Prof. C. S Upadhyay</em></td>
</tr>
<tr>
<td>10:30 – 10:45 AM</td>
<td><strong>Tea Break</strong></td>
</tr>
<tr>
<td>10:45 – 1:00</td>
<td>Discussion on Faculty improvement - continued research &lt;br&gt; <em>Prof. C. S Upadhyay</em></td>
</tr>
<tr>
<td>1:00 – 2:00 PM</td>
<td><strong>Lunch Break</strong></td>
</tr>
<tr>
<td>2:00 – 3:30 PM</td>
<td>Critical Thinking + Ethics &lt;br&gt; <em>Prof. R.P. Chhabra</em></td>
</tr>
<tr>
<td>3:30 – 5:00 PM</td>
<td>Statistical Methods and errors &lt;br&gt; <em>Prof. Sandeep Sangal</em></td>
</tr>
<tr>
<td>5:00 PM</td>
<td><strong>Closure</strong></td>
</tr>
<tr>
<td></td>
<td><strong>High Tea</strong></td>
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</tbody>
</table>
### Day-1, January 29, Monday: General principles

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 – 9:30 AM</td>
<td>Registration</td>
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<tr>
<td>9:30 – 10:30 AM</td>
<td>Welcome Talk - Generic curriculum and its constituents, Academic structure of IIT Kanpur</td>
</tr>
<tr>
<td></td>
<td><em>Prof. C.S Upadhyay</em></td>
</tr>
<tr>
<td>10:30 – 11:00 AM</td>
<td>High Tea</td>
</tr>
<tr>
<td>11:00 – 11:50</td>
<td>What to test for? Learning evaluation through quizzes, exams, projects.</td>
</tr>
<tr>
<td></td>
<td><em>Prof. M.K Harbola</em></td>
</tr>
<tr>
<td>11:50 – 1:00</td>
<td>MOOCS, Flipped Classroom paradigms</td>
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<tr>
<td></td>
<td><em>Prof. T.V Prabhakar</em></td>
</tr>
<tr>
<td>1:00 – 2:00 PM</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>2:00 – 2:30 PM</td>
<td>Bringing Engineering Drawing to Life – an interaction</td>
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<td></td>
<td><em>Prof. A. Saxena</em></td>
</tr>
<tr>
<td>2:30 – 3:00 PM</td>
<td>Course monitoring mechanism at IITK</td>
</tr>
<tr>
<td></td>
<td><em>Prof. C.S Upadhyay</em></td>
</tr>
<tr>
<td>3:00 – 4:00 PM</td>
<td>How to prepare for a course?</td>
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<tr>
<td></td>
<td><em>Prof. S. Baswana</em></td>
</tr>
<tr>
<td>4:00 – 5:00 PM</td>
<td>Experiences with Brihaspati as a teaching management system</td>
</tr>
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<td></td>
<td><em>Prof. YN Singh</em></td>
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<tr>
<td>5:00 – 5:15 PM</td>
<td>Overcoming functional English deficiency - Introduction to EPP</td>
</tr>
<tr>
<td></td>
<td><em>Prof Bhaskar Dasgupta</em></td>
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</tbody>
</table>

### Day-2, January 30, Tuesday: Science Core

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>9:15 – 11:15</td>
<td>Core Physics – objectives, content, preparation, delivery, expectation</td>
</tr>
<tr>
<td></td>
<td><em>Prof. M.K Harbola</em></td>
</tr>
<tr>
<td>11:15 – 11:30</td>
<td>Tea Break</td>
</tr>
<tr>
<td>Time</td>
<td>Event</td>
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</tr>
<tr>
<td>11:30 – 12:30 AM</td>
<td>Core mathematics – objectives, content, preparation, delivery, expectation</td>
</tr>
<tr>
<td></td>
<td><em>Prof. T. MuthuKumar</em></td>
</tr>
<tr>
<td>12:30 – 1:00 PM</td>
<td>Teaching with MOOCS</td>
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<tr>
<td></td>
<td><em>Prof. D. Gupta</em></td>
</tr>
<tr>
<td>1:00 – 2:30 PM</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>2:30 – 3:10 PM</td>
<td>Teaching of Fluid Mechanics</td>
</tr>
<tr>
<td></td>
<td><em>Prof. Debopam Das</em></td>
</tr>
<tr>
<td>3:15 – 3:45 PM</td>
<td>Teaching Dynamics and vibration</td>
</tr>
<tr>
<td></td>
<td><em>Prof. Anindya Chatterjee</em></td>
</tr>
<tr>
<td>3:45 – 4:15 PM</td>
<td>Tea Break</td>
</tr>
<tr>
<td>4:15-4:45 PM</td>
<td>Introduction to Electronics</td>
</tr>
<tr>
<td></td>
<td><em>Prof. B. Mazhari</em></td>
</tr>
<tr>
<td></td>
<td><em>Prof. S. P Das</em></td>
</tr>
<tr>
<td>5:15 – 5:45 PM</td>
<td>Material Science in UG education</td>
</tr>
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<td></td>
<td><em>Prof. Ashish Garg</em></td>
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</tbody>
</table>

**Day-3, January 31, Wednesday: Departmental core**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 – 10:30 AM</td>
<td>Introduction to department – objectives, emphasis, course template, break-up of theory and lab. component</td>
</tr>
<tr>
<td>10:30 – 1:00 PM</td>
<td><em>Session on department core – major theory courses</em></td>
</tr>
<tr>
<td>1:00 – 2:00 PM</td>
<td>Lunch</td>
</tr>
<tr>
<td>2:00 – 5:00 PM</td>
<td><em>Session on department core – major lab. courses, including concept of lab. lecture.; visit to labs.</em></td>
</tr>
<tr>
<td>4:00 – 4:15 PM</td>
<td>Tea Break</td>
</tr>
<tr>
<td>5:00 – 6:00 PM</td>
<td><em>Session on department core Continued...</em></td>
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</table>
## Day-4, February 01, Thursday: Lab. Visits

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>9:30 – 10:30</td>
<td>Automated Tutoring of Introductory Programming course</td>
</tr>
<tr>
<td></td>
<td><em>Prof. Amiya Karkare</em></td>
</tr>
<tr>
<td>10:30 – 10:45 AM</td>
<td><strong>Tea Break</strong></td>
</tr>
<tr>
<td>10:45 – 12:00 PM</td>
<td><strong>About TEQIP III</strong></td>
</tr>
<tr>
<td></td>
<td><em>Prof. P.M Khodke</em></td>
</tr>
<tr>
<td>12:00 – 1:00</td>
<td>Chemistry Lab visit</td>
</tr>
<tr>
<td>1:00 – 2:00 PM</td>
<td><strong>Lunch Break</strong></td>
</tr>
<tr>
<td>2:00 – 3:00 PM</td>
<td><strong>About TEQIP III</strong></td>
</tr>
<tr>
<td></td>
<td><em>Prof. P.M Khodke</em></td>
</tr>
<tr>
<td>3:15 – 4:30 PM</td>
<td>Physics Lab visit</td>
</tr>
<tr>
<td>4:30 – 5:00</td>
<td><strong>Tea Break</strong></td>
</tr>
<tr>
<td>4:15 – 5:30 PM</td>
<td>Discussion on UG research/BTP and engaging the UG students</td>
</tr>
<tr>
<td></td>
<td><em>Prof. C.S Upadhyay, Prof. Shakti Gupta, Prof. Debopam Das</em></td>
</tr>
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</table>

## Day-5, February 02, Friday: Research methodologies

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>9:00 – 10:00 AM</td>
<td>Critical Thinking + Ethics</td>
</tr>
<tr>
<td></td>
<td><em>Prof. Goutam Deo</em></td>
</tr>
<tr>
<td>10:00 – 10:15 AM</td>
<td><strong>Tea Break</strong></td>
</tr>
<tr>
<td>10:15 – 11:15 AM</td>
<td>Technical Writing + Resources</td>
</tr>
<tr>
<td></td>
<td><em>Prof. Ashish Garg</em></td>
</tr>
<tr>
<td>11:15 – 12:15 PM</td>
<td>Statistical Methods and errors</td>
</tr>
<tr>
<td></td>
<td><em>Prof. Rajeev Gupta</em></td>
</tr>
<tr>
<td>12:15 – 12:30 PM</td>
<td>Importance of the HSS component of teaching</td>
</tr>
<tr>
<td></td>
<td><em>Prof. Achla Raina</em></td>
</tr>
<tr>
<td>12:30 – 2:00 PM</td>
<td>Discussion on Faculty improvement &amp; Closure</td>
</tr>
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<td></td>
<td><em>Prof. C S Upadhyay</em></td>
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</table>
### Group C: February 9-13, 2018

#### Day-1, February 09, Friday

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 – 9:30 AM</td>
<td>Registration</td>
</tr>
</tbody>
</table>
| 9:30 – 10:30 AM | Welcome Talk - Generic curriculum and its constituents, Academic structure of IIT Kanpur  
*Prof. C. S Upadhyay* |
| 10:30 – 11:00 AM| High Tea                                                             |
| 11:00 – 12:00 PM| What to test for? Learning evaluation through quizzes, exams, projects.  
*Prof. C. S Upadhyay* |
| 12:00 – 1:00 PM | Chemistry Lab visit                                                  |
| 1:00 – 2:00 PM  | Lunch Break                                                           |
| 2:00 – 3:00 PM  | Visit to Tinkering Lab                                               |
| 3:00 – 4:00 PM  | Tea Break                                                             |
| 4:00 – 5:00 PM  | Visit to Physics Lab                                                 |
| 5:00 – 5:15 PM  | Introduction to Electrical Engineering                                
*Prof. S.P Das* |

#### Day-2, February 10, Saturday

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
</table>
| 9:30 – 10:30 AM | Experiences with demonstrative teaching                               
*Prof. C. Venkatesan* |
| 10:30 – 11:00 AM| Tea Break                                                            |
| 11:00 – 12:00 PM| MOOCS, Flipped Classroom paradigms                                  
*Mrs. Revathy K.T* |
| 12:00 – 1:00 PM | Teaching Engineering Drawing                                        
*Prof. S Kamle* |
| 1:00 – 2:30 PM  | Lunch Break                                                          |
| 2:30 – 3:30 PM  | Course Monitoring                                                    
*Prof. C. S Upadhyay* |
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:30 – 4:00 PM</td>
<td>Tea Break</td>
</tr>
</tbody>
</table>
| 4:00 – 5:00 PM  | Overcoming functional English deficiency - Introduction to EPP  
|                 | Prof Bhaskar Dasgupta                                               |
| 5:00-6:00 PM    | Experiences with Brihaspati as a teaching management  
|                 | Prof. Y.N Singh                                                     |

**Day-3, February 11, Sunday**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
</table>
| 9:30 – 10:30 AM | How to Prepare for a course                                        
|                 | Prof. S. Baswana                                                    |
| 10:30 – 11:00 AM | Tea Break                                                             |
| 11:00 – 12:30 PM| Core mathematics - objectives, content, preparation, delivery,  
|                 | expectation                                                          
|                 | Dr. T. Muthukumar                                                    |
| 12:30 – 1:15 PM | Teaching Mechanics Today                                            
|                 | Prof. A. Chatterjee                                                 |
| 1:15 – 2:30 PM  | Lunch Break                                                          |
| 2:30 – 3:30 PM  | Experimentation                                                      
|                 | Prof. A. Kushari                                                    |
| 3:30 – 4:00 PM  | Tea Break                                                             |
| 4:00 – 5:00 PM  | Teaching of Dynamics                                                
|                 | Prof. C. Vekatesan                                                  |
| 5:00 – 6:00 PM  | Discussion on UG research/BTP and engaging the UG students          
|                 | Prof. C S Upadhyay / Prof. I Sharma / Prof. Y N Singh               |

**Day-4, February 12, Monday**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</table>
| 9:30 – 10:30 AM | Introduction to department – objectives, emphasis, course template, 
|                 | break-up of theory and lab. component                               |
| 10:30 – 1:00 PM | Session on department core – major theory courses                    |
| 1:00 – 2:00 PM  | Lunch                                                                 |
| 2:00 – 5:00 PM  | Session on department core – major lab. courses, including concept of 
|                 | lab. lecture.; visit to labs.                                        |
| 4:00 – 4:15 PM  | Tea Break                                                             |
| 5:00 – 6:00 PM  | Session on department core Continued...                               |
| 6:00 – 7:00 PM  | Teaching and Learning                                                
<p>|                 | Prof. Dheeraj Sangi                                                 |</p>
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Event Details</th>
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</thead>
<tbody>
<tr>
<td>9:00 – 10:00 AM</td>
<td>Critical Thinking + Ethics</td>
<td><em>Prof. Goutam Deo</em></td>
</tr>
<tr>
<td>10:00 – 10:15 AM</td>
<td>Tea Break</td>
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<tr>
<td>10:15 -11:15 AM</td>
<td>Technical Writing + Resources</td>
<td><em>Prof. Ashish Garg</em></td>
</tr>
<tr>
<td>11:15 – 12:15 PM</td>
<td>Statistical Methods and errors</td>
<td><em>Prof. Rajeev Gupta</em></td>
</tr>
<tr>
<td>12:30 – 1:00 PM</td>
<td>Importance of the HSS component of teaching</td>
<td><em>Prof. Achla Raina</em></td>
</tr>
<tr>
<td>1:00 – 2:00 PM</td>
<td>Lunch Break</td>
<td></td>
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<tr>
<td>2:00 – 3:00 PM</td>
<td>About TEQIP III</td>
<td><em>Prof. C. S Upadhyay</em></td>
</tr>
<tr>
<td>3:00 – 4:00 PM</td>
<td></td>
<td><em>Prof. H C Verma</em></td>
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</table>
## PARTICIPATING INSTITUTES

<table>
<thead>
<tr>
<th>S. No</th>
<th>Institutes</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Darbhanga College of Engineering, Darbhanga, Bihar</td>
<td>37</td>
</tr>
<tr>
<td>2.</td>
<td>Institute of Engineering &amp; Technology, Bundelkhand University, Jhansi, UP</td>
<td>17</td>
</tr>
<tr>
<td>3.</td>
<td>FET MJP Rohilakhand University, Bareilly</td>
<td>17</td>
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<tr>
<td>4.</td>
<td>Gaya College of Engineering, Gaya, Sri Krishna Nagar, Bihar</td>
<td>33</td>
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<tr>
<td>5.</td>
<td>Lok Nayak Jay Prakash Institute of Technology, Chapra, Bihar</td>
<td>32</td>
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<tr>
<td>6.</td>
<td>Muzaffarpur Institute of Tech, Muzaffarpur, Bihar</td>
<td>27</td>
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<td>7.</td>
<td>Baba Ghulam Shah Badshah University, Rajouri, JK</td>
<td>19</td>
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<tr>
<td>8.</td>
<td>Islamic University of Science &amp; Technology, Pulwana, JK</td>
<td>30</td>
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<tr>
<td>9.</td>
<td>Bhagalpur College of Engineering, Bhagalpur</td>
<td>03</td>
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<tr>
<td>10.</td>
<td>College of Technology, GBPUAT, Pantnagar</td>
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<tr>
<td>11.</td>
<td>G B Pant Engineering College, Pauri Garhwal</td>
<td>01</td>
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<tr>
<td>12.</td>
<td>Institute of Technology, Gopeshwar</td>
<td>06</td>
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<tr>
<td>13.</td>
<td>Jabalpur Engineering College, Jabalpur</td>
<td>06</td>
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<tr>
<td>14.</td>
<td>Madhav Institute of Technology &amp; Science, Gwalior</td>
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<td>15.</td>
<td>Motihari College of Engineering, Motihari</td>
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<td>16.</td>
<td>Nalanda College of Engineering, Chandi, Nalanda</td>
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<td>17.</td>
<td>Rewa Engineering College, Rewa</td>
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<tr>
<td>18.</td>
<td>S G S Indore Institute of Technology &amp; Science, Indore</td>
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<td>19.</td>
<td>Seemant Engineering Institute, Pithoragarh</td>
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<td>20.</td>
<td>Ujjain Engineering College, Ujjain</td>
<td>02</td>
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<tr>
<td>21.</td>
<td>Women Institute of Technology, Sudhowala, Dehardun</td>
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<td><strong>Total</strong></td>
<td><strong>255</strong></td>
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<tr>
<td>Institutes</td>
<td>Number of Participants</td>
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<tr>
<td>1. Bihar</td>
<td>140</td>
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<td>2. Uttarakhand</td>
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<tr>
<td>3. Uttar Pradesh</td>
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<td>4. Madhya Pradesh</td>
<td>21</td>
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<td>5. Jammu and Kashmir</td>
<td>49</td>
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<td><strong>Total</strong></td>
<td><strong>255</strong></td>
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Outcome

• This event was a great success as all the young teachers were introduced to methods of teaching and learning at IIT Kanpur.
• They learnt about institute building through lab development, course development, curriculum development, etc.
• They got to know about research methodology.
• They learnt about various course evaluation and monitoring techniques.
• They had a better understanding of their roles and responsibilities as a teacher to impart essential professional skills.
• This program gave the participants a platform to interact with best teachers at IIT Kanpur. All the participants participated actively in this program with great enthusiasm. They asked many questions from experts and explored future collaboration opportunities at IIT Kanpur. Labs at IIT Kanpur inspired them on how build a lab set up of their own.
SUMMARY of FACULTY FEEDBACK

Workshop

1. **Organization of the sessions**

![Pie chart showing the distribution of feedback on organization of sessions.](chart1)

- Excellent: 61%
- Good: 33%
- Ordinary: 6%

2. **Quality of Lectures**

![Pie chart showing the distribution of feedback on quality of lectures.](chart2)

- Excellent: 64%
- Good: 31%
- Ordinary: 5%
3. Effectiveness of discussions

4. Effectiveness of learning experience

5. Workshop duration
6. **Would you like to have more such sessions?**

- Definitely: 81%
- Maybe: 16%
- No: 3%

7. **Would you like e-lectures by experts on special topics?**

- Definitely: 84%
- Maybe: 14%
- No: 2%

8. **Suggest Specific topic that you would like additional expert lectures on**

- Artificial Intelligence, machine learning, soft computing
- Structured design, aerodynamic modelling
- Research labs available at IITK like antenna design & measurements
- Additional lecture on the biological science/biotechnology
- Language (english)
- Instrumentation, control system, measurement, process
- Machine, electric machines, power electronics, control system
- How to teach efficiently in biological sciences
- Non-linear systems/ modern control theory
- Food technology & related courses
- Food engg
- Current research or specific category
- Food science & technology/biotech
- Computer vision
• Fluid mechanics & mass transfer
• Kinematics of machine
• Manufacturing practices in modern applications
• How to improve my place how to be the part of startup india
• On BTP regular session on current research topic department wise
• Some lectures on technical skill for particular subject is required
• Food processing/ technology / engineering
• EMT, machine learning
• Thermodynamics in human life
• Expert lectures must be target oriented keeping the condition of our institute in mind
• Remote sensing and GIS
• Integrated water resource management
• More on research oriented coding
• Numerical techniques like finite element method, finite volume method
• Academic research
• Instrumentation part
• Discrete mathematics
• Nano-photonics
• Python programming, advanced computer architecture, machine learning
• Hot to set up labs (step by step)
• Analytical method of qualifying materials works & training
• HSS, English teaching
• Solar PV manufacturing process & other electrical appliances manufacture lecture
• Thermodynamics (entropy)
• Hydrology, irrigation
• Lecture from biotech/bioscience/bioengineering
• How to related basic science with the technical education
• Semiconductor devices
• Grid connected PV system inverter
• Lecture on OFDM, multicarrier CDMA, current mobile technologies, MATLAB.
• Electrical care subject related, MATLAB, LABIEW.
• Data analysis
• Computer architecture / hardware
• Computing, Algorithm.
• Computer architecture, read time system.
• Big data & cloud computing
• Large processing & deep learning.
• Departmental projects.
• Computer network
• Information security, operating system.
• Remote sensing & GIS.
• How to improve the course to words industry oriented.
• Photonics
• Machine drawing, FEM
• Lecture on preparing the content for classes
• Control over students.
• Non-convention machining.
• Soft skills( for final year students)
• Placement training program
• Electro-analysis; batteries; material science;
• Specific topics for particular are like math fundamentals of engg.
• Research in antenna design; Research in area of electronics & communication.
• Bio-Chemical Engg.
• Statistical software
• Food tech related topic
• There was nothing pertaining to food technology that could we taken up
• Allow to design a research problem for students
• Software learning workshops like SASS
• I want additional lectures on “how to write research papers”
• Effective teaching
• Workshop was excellent, just focus on departmental subjects more
• Analog/mixed signal/digital IC design
• Career guidance for students
• Algorithm optimization
• Mathematical software
• Can teaching be taught?
• Mathematics for computer science
• On latest topics in computer network domain
• Neural networks, marching learning
• Programming Language used in mechanical, civil, electrical engg
• Necessity of coding in engineering now a days
• Induction program should not be happen at same place. It should be changed so that we get exposure to other faculties for reputed institutions
• Theory of automata
• Thermodynamics
• Heat and mass transfer
• Specific talks on series of lectures 1. Mechanics 2. Dynamics
• How to prepare or develop the engg. lab and make it run
• Modern research trends for specific domain
• On research and paper publication
• Ongoing research areas
• Future opportunities for different streams
• Give some lectures on improving teaching quality
• Lecture on possible project in all subjects
• Lectures on specific branch and specialization
• Software related subjects
• Expert lectures on software like TCAD
• What makes a good teacher? research on specific topics
• Expert lecture how to patent/or subject a journal
• Experimental skills (lab) water & waste engg. Air and noise pollution
• Paper writing skills & use of LATEX
• Research oriented core subjects
• Lectures on soil mechanics keeping GATE as priority
• How to write an effective research paper
• Lecture by Sameer sir (ME IITK) on heat transfer
• Machine learning
• Latest construction methodology, advances in construction industry
• Increased departmental interaction time will be more helpful
• Research oriented latest topics in different engineering streams
• Network security, advanced maths
• Control system; power electronics
• Soft computing, cyber security
• MATLAB, NEURAL & FUZZY logic LABVIEW present trenos of electrical engg. Smart grid, renewable energy
• Ethics and moral value
• Forensics research, simulators
• Big data & analytics
• Doing research
• Computational Intelligence
• Lecture planning for whole sem, time management
• Preparing lectures
• Oral vs. written communication
• Boundary layer theory, magneto-hydrodynamics
• Latest technology: use experiments & development
• Image processing, discussion of research opportunities in each field
• Some detailed lectures on core subjects of respective branches
- Computational fluid flow and heat transfer
- CFD softwares like ANSYS FLUENT usage in the field of thermal engg
- Engineering softwares like ERDAS
- Renewable energy
- Recent research work lectures for all dept.
- Block chain, 10T
- Handelling big classes
- Evaluation of students
- Psychology-body language, personality
- Signal and systems
- Do average separate lectures for each department. Try to arrange technical staff of that department
- Subject wise sessions also included
- Kindly include some lecture in chemistry
- TOC, NN
- Teaching learning (methods)
- Research and projects how to initiate and carry forward on idea
- Clarity on rules & responsibilities as a teacher under TEQIP
- Course oriented lectures
- Theory of computation
- About on-going research in areas of heat transfer, fluid mechanics and renewable energy
- Conduct the mathematics with engg subjects
- Core chemistry based lectures for B.Tech first year
- Adaptive control system
- Mathematics
- Management of adverse situations in work environment
- Personality development, theory of labs
- Robotics, industrial engg, automation, machine design.
- Lecture should be on irrespective branch of UG degree
- Digital electronics and basic electrical engg
- Topics on how to publish research paper
- B.Tech chemistry course
- Patents its significance
- Lectures should be more focus on irrespective of domain of UG degree
- Materials, modeling softwares
- Lectures on course topic of civil engg
- How we can give attention to a large no of student class
- Topics related to importance of evolving areas of research like material science
- Measurement and instrumentation training
- Laboratory discussion in detail
- How to motivate engg. Students
- Real life problem for B.Tech students
- How to prepare and plan lab courses
- Teachers and students relationship
- Placement related topic
- Stress relief topic
- RF and Microwave
- Theory of computation
- Data structure & algorithm
- Computer networks
- Quantum computation
- CAD software
- To add some instrumentation lecture & lab class
- Basic electronics, microwave engg.
- Future research exposure
- Teaching effectiveness
- Do average separate lectures for each department. Try to arrange technical staff of that department
- Subject wise sessions also included
- Kindly include some lecture in chemistry
• TOC, NN
• Teaching learning (methods)
• Research and projects how to initiate and carry forward on idea
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• Data structure & algorithm
• Computer networks
• Quantum computation
• CAD software
• To add some instrumentation lecture & lab class
• Basic electronics, microwave engg.
• Future research exposure
• Teaching effectiveness

9. **Additional Suggestions**

• Regularly visit our colleges and guide us regularly by induction program
• Show how to perform at least 2 experiments from each work shop rather than try to cover each experiment by explanation
• Regular visit to our colleges to know the current scenario of our college and we the assistant professor working there
• Conduct the workshops/ science based on the department wise or topic wise basis
• If the induction or such program can be executed discipline wise
• Departmental lab visit should must leave for EE
• As we are from food technology dept. please provide training on our core subject i.e. food process engg. Food tech and related subject
Subject experts from IITs teaching food tech/engg
Expert has to visit respective college
Provide training on some specific software
If IIT can provide a TEQIP support department wise, it would be great of research & BTP
As a mentor please visit the institute at least on in every six month
Courses can be made more departmental specific rather than common subjects
Refrigeration, HMT
Branch wise lectures should be there
Lab session should explore more
It will be more effective if the induction program will be area wise
Please make workshop separately for individual department
Expose to handouts & field visit
Program course should be more practical and real time oriented
Conduct program for faculties from literature backgrounds as well. So that language teachers can also benefit and have a career development
Increase the course duration
Increase the salary for doctoral degree candidate
Software of students and our interest.
Workshops should be arranged on-going project in IITs, So that we can get ideas.
More focus should be on departmental teaching.
Allowed or oriented new recruited faculty toward course work like teaching more than mgt. type work.
Department wise interaction should be there.
There must be sufficient time for visiting department lab interaction with training & placement department.
Different institutes will have different problems. Pls are have some talks at individuals college level.
More of hands on training how to present a teaching – learning experiment in a real time content.
There should given more time for department wise
Schedule of workshop was very tight for electronics & Communication
It would be great if a faculty from IIT’s give talks to our students via skype/physically
Please arrange such course
Online classes/training, e-courses
Additional support for teaching
Online workshops could be done(video conference), overall the induction program was very good, specially technical sessions should be designed according to course
Please make arrangements so that international conference can be attended
Try to emphasize the institutional heads to provide TEQIP faculty better facilities for doing
We certainly need more programs specifically on research development in core branches
Conduct workshops on accreditation.
Analog electronics, electronic devices
Teaching by IIT faculties for students; visit to our institute
Workshop on documentation for accreditation
There should be workshop on every basic subject of engineering courses like CSE, ME, ECE, EEE.
How professors at IIT teach theory & lab of that respective subject
Make the batch smaller
Workshop on specific research topics
Conduct more and more workshops at our institutions so that we can use our advanced labs for research program
Lectures by experts on our area of interest/ research as well
I want to attend such type of workshops in future also
Make this type of workshop but with specific specialization such that, mechanical workshop for mechanical faculty
Directly transfer the salary so as to avoid the delay. Officials do not know how to do it
Please do not depend on state bodies. Give us directly what we deserve
Overall this program was good but some days it become very long which made difficult to sit continuously 10 hours.

There must be a session of lab experiment which must be performed by us.

Workshop with the arrangement of the college and new faculty explaining their roles.

Lab visiting should be more emphasized.

Branch wise lectures should be more effective.

The lectures given by few experts is irrelevant because they only explain the course structure on IIT Kanpur.

It is very compact arrangement of seating which is not good.

Organize a program which allows faculty to attend teaching on specified subject by experts.

Request to share video lectures of professors actually taught in regular classes at IITK. This would extremely helpful in understanding body language & covering point and delivering process.

Various lectures on various subjects of civil engg.

Please add some lectures from management and leadership.

Time given for faculty induction program is actually very short.

Session should be focus more on practical, new research topics.

It will be better for us if some of the IIT faculty visits the campuses and motivate us at least once in semester, so that we can come out from the negative environment within organization.

Participants should not be forced to attend lectures of other discipline to which they do not belong. It should be optional.

Lab session also should be there.

Heat transfer thermodynamics fluid mechanics, renewable energy.

Lengthen the duration of such programs.

Conduct the programs which are more subject based and research based.

There should be training for faculty members for latest useful software in respective discipline.

Departmental research.

Current projects on which IITK is working.

Interaction with PhD & M.Tech scholars, what research they are doing.

B.Tech project ongoing so that we may get idea.

Arrange additional lectures on important topics.

A central portal (other than the NPIU website) for TEQIP III where all relevant doubts can be accessed.

A database which can be accessed for all workshops/seminars/expert lectures conducted in the past (& future) for resources.

Department oriented program will be more helpful to us.

Database management system (DBMS), graph theory.

Subject wise sessions should be organized.

Lectures could have been more in general rather than in specific topics of some subjects.

Duration of course should be more.

We should be offered to interact with IIT students too.

Session should be branch wise.

Actually I want to watch video lectures on digital electronics.

TEQIP should organized this conduction program more so that we can have more & better experience.

Wonderful experience in IITK campus.

Interaction of specific departments are quite helpful.

Please conduct this type of sessions once in a year so that it gives motivation to us.

You should also introduce to us that how IIT managing other activity other than teaching like culture, sports etc.

To perform additional lecture on some particular topics.

Short term courses can be arranged on research areas & softwares.

Please clear us the leave and other support.

More topic specific courses.

For respective discipline should also be conducted.

CFD.
- Specific guidelines to host institutions by NPIU in order to resolve issues of TEQIP faculty
- Please provide single room to each faculty
- Class time should be less
- Frequent workshop or course training in IIT and in college. There should be internship program for the college students in IITs
- Electrical machine and taking lab & seminar
- Fluid Mechanics
- Civil engg. , river engg. geotechnical engg

**Teaching**

1. **Do you have additional support for teaching (tutors, graders, teaching assistants, etc)?**

   ![Graph showing 27% Yes and 73% No for additional support for teaching](image1)

2. **Do you give class projects for UG classes?**

   ![Graph showing 71% Yes and 29% No for class projects for UG classes](image2)
3. Do you have sufficient resources for laboratory courses?

4. Would you be interested in developing curriculum for lab courses for your college?

5. Did this course help you to understand your role as a teacher?
6. **Is the library/journal/e-connection support adequate?**

- Sufficient: 12%
- Inadequate: 88%

7. **Would you like to have common (TEQIP) repository of course material?**

- Definitely: 85%
- Maybe: 14%
- No: 1%

8. **Would you like to visit IITK to participate in and develop course material (existing or new)?**

- Definitely: 94%
- Maybe: 6%
- No: 0%
9. Would you like to participate in creation of the repository material (course file/lab Manuals/question bank etc.)?

![Pie chart showing participation preferences.]

- Definitely: 88%
- Maybe: 11%
- No: 1%

10. How can IITK effectively help you prepare for teaching?

![Pie chart showing preferred help areas.]

- Workshops: 42%
- Content: 26%
- e-courses: 32%

11. Which Subject do you teach?

- Data structure, algorithms, image processing, artificial intelligence.
- Design of RCC structure
- Analysis of structure
- Analog and digital computation digital electronics, EMFT, DSP, basic electrical & electronics
- Molecular biology, protein energy, MB labs
- Communication skills
- Communication engg, electrical measurement & measuring inst.
- Digital, utilization of electric power
- Biology
• Material science, tribology machine design I & II
• Control systems & instrumentation
• Thermodynamics & chemical engg.
• Heat transfer, food engineering operations
• Chemistry
• Data mining, data structure and algorithm, digital image processing
• Heat and mass transfer
• KM & MD in mechanical
• Solid mechanics, manufacturing fluid, non-convention machining practices
• Compiler, algorithm
• Manufacturing engg, material science
• OS, DS, C
• Digital electronics
• Chemistry inorganic
• Surveying
• Hydrology
• Water resource management
• DMBS graph theory
• Web technology
• Mathematics
• Communicative English
• Physics
• Food technology
• Advanced computer architecture
• Software engineering, information security
• Environmental engineering
• Food processing & preservation technology, microbiology lab
• Chemistry
• Structural analysis, strength of materials, design of RCC & Steel structures
• Network theory
• Till now subject is not assigned
• Communication engineering.
• Basic electrical & Electrical Machine.
• Fundamental of computer + lab, data mining + lab, distributed computing + lab.
• Computer architecture.
• Real time system
• Network Analysis, power system analysis and power electronics, basic of electrical engg.
• Computer network, operating system
• Design of steel structure.
• Structural analysis.
• Integrated circuit design.
• H&T, engineering mechanics
• Machine Design
• Heat and mass transfer machine drawing fluid mechanics.
• Production engineering
• Thermodynamics
• Signal system and digital signal processing.
• English
• Control system engineering
• Chemistry
• Algorithms
Wireless communication, digital communication, research methodology
Radar System Design
Process engg (food), thermal processing of food
Instrumentation, food process course
Food technology
Core OS subjects and machine learning, pattern Recognition, artificial intelligence
Structure dynamics design of steel structures.
Analysis of structures
Physics
Structural analysis, structural dynamics, earthquake resistant design
Geotechnical engineering
Material science
Theory of computation
Mathematics, optimization techniques
Algorithms, architectures programming, security
Computer networks, computer programming languages, data structure, microprocessors
C Programming, Image processing
Database
Heat & mass transfer
Thermodynamics, strength of material, DME, TOM, MCTD
Thermal engineering
Manufacturing science, industrial economics
Communication system, control system, electronics devices
Unconventional machining process
Machine
Digital electronics & power electronics
Basic electronics, VLSI design
Linear algebra
Mathematics
Data structure, object oriented programming, data mining
Fluid mechanics, hydrology
Irrigation, surveying, designing on hydraulic structures, environment
Electromagnetics, analog electronics, power electronics, digital electronics, SSPD, signal & systems
Soil mechanics, fluid mechanics, open channel flow
Construction planning and management airport engg & planning
Transportation engineering, transportation planning, soil mechanics
Soil and rock mechanics
Strength of materials
Steel structure bridge engg.
OS, Data Structure, COA, C, C++
Structural analysis, SOM, design of steel structures
Computer networks, data mining, software engg.
Linear integrated devices
Electronics measurements & instrumentation, analog communication
HVAC & DC transmission systems
Geo-technology engineering, ground water hydrology
Ethical hacking
OS, DBMS, CN, Java
Cryptography, network security, operating systems
Linux admin
Communication system, image processing
Electrical machine, power system, networks analysis
Fluid mechanics, thermodynamics, HMT, machine design
Hydrogen irrigation engg
Structural engg. RCC design of steel structures, Mechanics of solids
Internet and web technology
Information security, cryptography
Intelligent instrument, microcontroller, control
Design of steel structures
Production technologies
Operational research
Engg. Chemistry
Computer organization parallel computing
Civil engineering (water resources)
Haven’t been assigned any teaching load as of yet
Data structure
Thermodynamics
Refrigeration and air conditioning; power plant engg.
Mathematics I & II
Chemistry
Thermal engg. FM
Basic electrical engineering
Mathematics
Basic mechanical engg. Thermodynamics, FM
Theory of machine, fluid machinery, SOM
Electrical power system
Please give the link for NPTEL on digital electronics in IIT Kanpur
Applied chemistry
Basic mechanical engg CAD/CAM
Basic electrical engg.
Microprocessors & its applications
Engineering mechanics, industrial pollution
Highway Engg I & II ,basic civil engg
UG students
Physics
Nanotechnology / Nano-electronics
Transportation engineering, surveying, soil mechanics, irrigation
Computer architecture, principles of programing
Risk analysis, bio process engineering of technology
Polymer
Satellite communication
Chemistry
Optical fiber, telecommunication, switching system
Right now teaching some theoretical subjects like modern trends of IT (MTIT) & computer & society
Industrial pollution elements of ME

12. What is average student to teacher ratio in your institute?

- 25:1
- Not yet started so don’t know right now
- 60 students per class
Yet classes not started.
Class work not started yet.
24:1 (After TEQIP in EEE department.)
25:1
45:1 - In civil engineering department
40:1
24:1
22:24 (After TEQIP III recruitment)
25:1
20:1
1:60
24:1
24:1
As I haven’t any lecture to B.Tech students. But I heard it around to be 50-60 students in a class one lecture I have delivered to M.Sc. 1st year students having 24 number.
60:1
25:1
50:1
30:01
30:1 (for M.Sc); 60:1 (for B.Tech)
Don’t know
20:1
60:12
24:1
24:01
25:1
20:1
Yet to be defined as classes are yet to be start fully. Ratio may be 15:1 or 20:1
10:1
15:1
55:1
120:17
60:1 for UG & 20:1 for PG
280:9
15:1
20:3
20:1
60:1
30:1
8:1
Mechanical: 20:1; overall 12:1
40:1
25:1
50:1
33:1
17:1

13. How TEQIP can improve your teaching?

- By facilitating to primary and basic needs for teaching. Give and help us to explore my best & contribution in PhD
- By providing best opportunities
- Through providing good teaching contents and question paper
- By providing research grants, books, funding for conducting UG labs, exposure to the updated skills
- By conducting workshops
- by frequently monitoring and mentoring
- training in different IITs and IIMs
- provide resources help us attend FDP conferences
- by giving more training and resources
- by providing resources
- faculty development program at IIT with subject experts
- freedom in content preparation of courses
- by providing adequate infrastructure and facility
- giving ideas of teaching, framing course content & papers & evaluating students
- allow us to be in touch of IITk
- by providing more workshop, communicating with college admistration
- developing teaching aids
- by continue workshop and training
- provide expert lectures from different IITs
- by training on specific topics
- R&D support
- Provide some freedom in syllabus setting, proper classes
- Short term faculty development program
- By training us on various updated topics so that we can on to our students.
- By organizing workshop on specific topics.
- Provide the library / internet / computer.
- Organizing workshop based on branch specification.
- By providing tools like good internet, infrastructure.
- By giving regular training and guidance.
- Conducting faculty improvement programs.
- Allowing I year course work in IITs for PhD provided.
- By organizing time to time faculty development programs department wise.
- Provide a smart class’s better class room.
- By providing additional workshop.
- By organizing teaching improvement program
- I may need some of help to learn practical training myself before I teach in to student, I want to be sure.
- By providing necessary requirements for teaching aids.
- Providing modern day tools like projectors, conference.
- Through workshops, expert lecture etc.
- Through more workshops.
Methodology of education at IITK helped me to improve my teaching disciplining students
Regular teaching in clearing our doubts/tactics of teaching
Teach us/learn us in advance courses in research
By training on some innovative/significant technologies
By providing e-courses related to subject
By teaching/guiding with latest methods providing assistance w.r.t resources
May be by workshop & courses in which we feel deficient
Freedom to formulate research problems for students
By providing similar type of program & exposure to other institutions
Provide exposure to different essential courses learning in IITs & their methodologies
By arranging induction program like this and by helping in exposure to latest development
By being exposed to faculty from prestigious institutes like IITK
Continued interaction with IITK faculty
Providing support and resources
Provide list of supplies for setting labs
By organizing more workshops and guide us
Improve infrastructure at college
Provide resources like smart classes
Collaborative with IITs
By conduction such induction program time to time. And exposure to such professor motivate us a lot
By providing some effective faculty improvement program
Organize workshop on teaching methodology
Lab visit at IITK
Arranging seminars and workshop on FDP
By making a common forum where we can contact with different experts of relevant field
Conducting more workshops on improve teaching quality
By organizing workshop in recent technology and research
Approach to specialize teachers for doubt clarification if any in future
TEQIP conducts teaching improvement program
By the help of TEQIP, I can do further research work
By arranging e-lectures and by motivating me in different manner
To decide the current research areas related to topic being discussed in the class
Workshops, induction program
Making availability & resources such as laptops, projectors etc
Make collaboration with parent IITs and sharing, teaching classes on a web portal for NPIU faculties at least
It will provide a very good experience of teaching and improve teaching skills
Providing a seat for attending lectures of IITk professor during summer and winter semesters
By providing some teaching equipment (like laptop)
Instability and harassment by senior faculties
By showing effective method, lab partition, I am impressed and falling motivated
Provides exposure
By regularly conducting online and onsite courses
To give me overall idea of different courses & what topics should be covered under them
By arranging common discussion platform with teachers from IITs
By organizing teaching workshop on regular interval
Provide us time to time FDP
By conducting practical sessions of labs
By arranging such sessions with stablished professors which can give simple insides of subject which are different to generate by myself
Contact with IIT’s dept. professors
Design chemistry course more
• By arranging workshop like this induction program
• By appointing us as a permanent faculty
• By involving us in workshops, seminars, and providing resources like books etc.
• Expert lectures and a chance to collaborate with experts from other institutes
• Training
• By regularly monitoring the basic labs and classrooms facility at institutes
• Please put more emphasis on departmental/ core topics, limit general sessions to 3-4
• By providing the infrastructure
• By providing this kind of workshops where the experienced person will share their experience in teaching
• TEQIP can provide best book to our library so that us as well as student can read & understand the course
• To get training from IIT professors
• Through training program and providing basic facilities
• By conducting workshops
• Workshops, short term courses
• Organize workshops & providing stationary, desktop, internet to facilities etc.
• By providing digital library to every branch
• College timing is too much. So there is problem in preparing lectures TEQIP should ask college to give us sufficient time
• By demo class
• Help us to interact with best minds in our related subjects
• Provide good internet and library facility in college
• Cabin facility
• Proper guidance for searchable lead allocation to a faculty
• Giving financial support for projects and help us in getting on duty leave for attending conferences/workshop
• Workshop, research innovation, lab development
• By providing resources- computational and software
• Regularization of post
• By enabling host institution to build smart classrooms
• Non availability of books in library.
• I have learned a lot things needed for a quality UG teaching
• Through motivation
• By providing suitable resources like internet, books in library
• By providing guidance through IITK faculty
• It should be specifically for teaching & learning class. It should not be common class for all branches
• Research support from IITs
• Providing more facility by means of financial backup for labs

14. What problems you face in teaching?
• Assigning of more than 2 papers. Lack of facility (like building, well equipped lab and classroom) etc.
• Absence of students
• Resource problem
• Subjects given should not be more than 2 to be taught and no non-academic work
• Inadequate teaching materials, books and shortage of the smart classes, computer etc.
• The exam
• Lack of necessary equipment
• Shortage of student that means bunk of students
• Smart classrooms, standard labs
• Not proper classroom, no projector
• Lack of resources for smart classroom
• Overload of subjects. I think two subjects/ semester is justified
Proper guidance & teaching assistant study material
Attendance of student, lack of classroom resources and demotivation of students due to mismanagement of institute
Inadequate resources
Attendance
Lack of software and books etc.
Language problem, students are not motivated enough to do self study at all
Too much teaching load
No teaching assistance are available
Student participation
Smart class room
Subject related books are not available
Difficulty in finding time for 3rd and 4th year students for communication classes
Not yet started teaching in our college.
No facility of internet, programs in classroom.
There is only 4 classrooms so that have many problem for taken the lecture on line.
Absence of adequate infrastructure.
In availability of some reference books.
Time management during delivering lectures.
Involve me more on NBA or management type work other then teaching.
Lack of recourse in classroom in my college projectors.
Requirement of smart classroom
Lack of sources like smart classes/ cameras for virtual classes.
I am new to teaching job. So managing time to lecture is a bit worry some to me right now. Beside this, concluding the lecture in a best way is also problematic upon which I am working on to be the best among the teachers.
No M.Tech program in our university
No projector, laptop available
Less motivated students, I also believe courses that are not too beneficial should not be there as courses
Till now I have not pointed any such problem
TA shortage, lesion of working days in Kashmir because of disturbance
Lack of resources like PPT facility, large no of students, small classroom etc.
Disinterested students
Lack of knowledge both in students & me
First time teaching outside of Kashmir; so problem with local language
Too many lectures I am giving
We don’t have adequate classroom structures.
Teacher student coordination, team work, interaction sessions
No proper classrooms & definitely no smart classes
No loudspeaker facility for teaching a big class
Managing students is difficult most of the students background knowledge is not strong
Main problem is the administration work with my teaching. We have to give our time doing data entry
Covering/teaching the given course content in specified period of time (time management problem)
Resources, less digitization
Conducting the experiment in lab
Preparing manuals for lab
Lack of basic requirements
Behavior of permanent faculties
Staff deficiency
Poor library, no stationary, delayed salary
Communications skills
- Student’s basic concepts about subject is not strong which resist me to go towards syllabus designed for them. I have to work on their basics too
- By providing some effective faculty improvement program
- We are not getting any sitting arrangement and laptop
- Insufficient infrastructure and resources
- Inadequate books, not connectivity, accommodation/communication, in consistency in electricity, lab assistant/lab staff members
- Attendance is very poor in class because attendance is not compulsory in our college so students always complained that classes is not going properly
- Lack of experience
- Lack of computer facilities
- There should be PPT teaching at some topics to make teaching enjoyable for students
- Limited or no resources
- Lack of technical staff & lab assistants
- Shortcoming of basic resources
- By taking concept; idea through emails
- Faculty motivation cooperation and availability of books and internet
- Ability to provide practical issues
- Teaching equipment like smart classes are not available
- Good & enough books are not available in library
- Rigid examination system limits how I can evaluate students,
- No lab course for some important subject like operating system
- Lack of practical knowledge amongst lab staff & students to create hardware projects
- Students are more interested in competitive exam than academic
- Absence of students demoralize a bit
- Getting the insights of subject, why something is used to convince the student, specially theoretical subjects
- Irregular strength of students and age old course materials
- No internet connection, no sitting arrangements not allotted subjects that are of my interests
- Basic amenities missing (internet, computer, seating place)
- Books/reference books missing
- Students miss out on classes due to non-seriousness in conducting classes by earlier faculty members
- Workshop is not as per the AICTE norms in our college
- Unsure of current knowledge level of student audience. In adequate visual aids arranging content flow for theory part
- Currently I did not face any problem
- Attendance of student in these college is the major problem
- My subject that I am teaching is different that what I teached earlier so these subjects are not technical one
- Students activities towards lecture
- Basic facilities
- In collecting appropriate demonstrative examples or experimental regarding theory
- Less attendance
- Less class & major subjects
- Stationary, internet, desktop etc. TEQIP coordinator is not supporting
- The sequences of content of subject in semester a problem
- Real examples through which student can connect themselves with the subject
- Too much paper work, thus not have sufficient time
- Also subject should give as per our interest
- Lack of basic infrastructure
- No classroom projectors
- Not having basic instruments
- Class strength is not so much yet, and for PPT there is not projector in class rooms
- The sequence of content of subject in sometime is a problem
- Computational resources
- Projection
- Modern classroom facilities like projectors, printers etc.
- My teaching is very interesting so I am unable to improve attendance. I would improve the quality of my teaching
- Low attendance of final year students

## Research

1. **Would you like to visit an IIT for a short visit/internship/post-doctoral stint, if offered (via TEQIP)?**

![Pie Chart](image1)

- Definitely: 95%
- Maybe: 5%
- No: 0%

2. **Would you like to share/use research infrastructure at IITK, if made available?**

![Pie Chart](image2)

- Definitely: 97%
- Maybe: 3%
- No: 0%
3. **Would you like to conduct collaborative research with IITK faculty?**

- **Definitely:** 94%
- **Maybe:** 6%
- **No:** 0%

4. **Would you like lectures by experts (Indian and International) on niche research areas/topics?**

- **Definitely:** 94%
- **Maybe:** 6%
- **No:** 0%

5. **Do you want special-topic conferences?**

- **Yes:** 90%
- **Maybe:** 10%
- **No:** 0%
6. **How can TEQIP help improve your research?**

- Firstly ensure our study and research. Regularly guide us from your side so that I can fill up the gaps required for effective teaching and research.
- Ensure our PhD programs facilitate to download research paper and faculty and lab access
- By providing well guidance through IITK professors
- Provide me assistance of the research lab like antenna design
- By providing opportunity of enrolling for PhD part time at some IIT or any other institute
- To send IITK for this and to send IITK professor to our college regularly
- By giving more freedom by college
- Collaboration with leading institutes in the subject. Now with universities to conduct research facilities
- Collaboration, instrument wise support, funding
- By giving the grant & support for research
- Provide me a proper equipment
- If it will allow us to run our projects with proper guidance from professor at IITK and allowing us to participates in various workshops & conference
- To know my roles
- Con enroll as a part time candidate at IIT can provide a co-advisor for research
- TEQIP help by providing the opportunity for higher studies in IIT and IISC and allowed to go and visit lab, project with students
- By forming a bond between faculty and different facilities of different IITs
- By setup the good equipment and allow to attend the some activities going at IITK
- By providing support in teaching and funding etc.
- Provide support grant for international conference inside india as well as abroad
- By providing research fund or initial grant to begin
- Provide workshop with pay leave, research oriented conference and some facility to attend research oriented activity or participate with pay leave
- By providing PhD enrollment through TEQIP
- By funding our new ideas
- I want few instruments like basic thing, UV-chamber for analyzing TLC. Chemicals required for doing reactions for research point of view
- I want that IITK should give facilities for analyzing the samples.
- Develop advance research library
- Provide online access of suitable journals
- Provide enrollment by QIP to PhD pursue
- Provision to make the faculty eligible for getting external funding from the SERB/DST/DBT/CSIR
- By giving the accessing facility of IEEE transactions, papers etc
- Proper advice given by expertise on my research field
- By updating us on latest software and research areas.
- By providing facilities at our relative institutes & college rating with countries…… institutes like IITs, NITs.
- Lab setup/internet/computer.
- Giving permission to do PhD part time.
- Allowing to visit IITs or IISC regularly.
- Providing access to state of art research materials journals, books, software, equipments etc.
- Through connecting IITs professors & with their experiences.
- By giving us opportunity for visiting the IIT labs. And also interaction with IIT IISC professors.
- Allow me to do research from reputed institutes like IITs /IISC /NIT because in care of part time PhD they want at least 1 year course works.
• Organizing different workshops on different topics.
• Journal papers, conference papers.
• Providing access to the journal in my college.
• Funding, lab development in respective colleges.
• Providing college access to some sites like research gate, science direct, and also software like Ansys, etc.
• By providing mentorships to us from IIT professors.
• Allowing us to do part-time PhD.
• Allowing us to workshops, seminars.

Before joining TEQIP faculty, I was working as a postdoc fellow at JNCASR. So if TEQIP can help me in funding, I can continue to pursue my research also, which is going to benefit my institute & myself also. At the same time, in collaborative research, if TEQIP provides, I can also work at JNCASR & IIT Bombay to avail facilities they have.

• Providing research opportunities in top institutes like IITs and IISc.
• By providing research grants to start labs.
• By providing a platform to learn from Prof. of IITK helped me.
• Support the collaboration in lectures our home institution and IIT’s or other premise institution of the country.
• Teach us, give us opportunity to attend courses such as IITs during summer and winters.
• By training in field relevant research area in national institutes.
• May be help in research grants in future.
• By helping in getting to content related field expertise.
• After attending the incubation program at IITK, I think that TEQIP has already helped me to improve my research.
• By providing financial support, collaboration with institutions where ever is possible to do the research.
• Provide opportunity to send students for doing research in other institutes.
• Provide infrastructure, some grant.
• By allowing to pursue/do research in collaborative with top IIT’s and IISc.
• TEQIP can help by sufficient funding.
• Help for enrollment in a research program at IIT any of them.
• Proper funding to procure equipment to lab.
• Exposure to conferences & internship.
• Teqip can estimate us regarding the various projects.
• By providing guidance from IIT professors.
• Give me research fund.
• TEQIP should send each TEQIP faculty to go for research with researcher.
• By involving us in the research activities/projects list that are being done at IITs, IISc, NITs.
• Allow to collaborate with guides from IITs.
• Provide opportunity for pursuing PhD part-time from some reputed universities.
• By workshops and managing talks with experts and part-time PhD from IITs.
• Give us NOC to do part-time PhD. Give us permission to meet other facilities in other IIT.
• By providing some experts as a mentor on the specialized areas.
• If the research facility like lab adequate lab facility, access of good journal can make available at institute, we can research.
• Allow us to pursue part-time PhD in IIT.
• Online access of journal in my college.
• Digital library in college.
• Make this job permanent so that we can work without any fear that what will happen after three years.
• By providing us good exposure.
• By providing the opportunity to interact with IITK Professors and research scholars.
• Make available e-materials (journal) on the topic.
• Provide time for PhD.
• Most important, make TEQIP faculty permanent so that they concentrate on their jobs.
• Force colleges to have high speed LAN
• Online e-library kind of facility
• By giving research opportunity
• By facilitating the access of different journals & publications
• By providing books which require time to time
• By organizing summer workshops
• By providing some expert as a mentor on the specific area
• Give facility to access online journal free and provide fund for attain conference and workshop etc.
• We don’t have access to research papers
• Data collecting problems for water resources specialization
• Approach to concerned organization for data specifically
• By the help of TEQIP I can do my research work further, because it may provide me the software & computers which I needed
• By making me engage in PhD program after 3 years in some IIT and making a portal where all the researches done in India can be published and accessible to all for free
• Organize a seminar/workshop for civil engg dept. where all senior professors from IITs or experts from various institute would be variable to discuss the major current research projects whether to be employed in home or a abroad
• A common web portal NPIU members can discuss their ideas or where new projects are being posted and participants from the faculty members would be there
• Collaborating with prestigious research institute for long & short term research facilities part-time PhD etc
• Workshops on Technical paper writing skills
• Providing experimental facility to us by IITK
• They may provide a collaborative education/research with reputed college of IITK
• By helping us collaborate with IIT’s and providing proper tools, exposure & avenues for research
• Research grant
• Help in visiting institutions abroad
• By including sessions on modern technologies e.g. Data Mining, IOT, Fog computing etc.
• Online platform for knowledge sharing.
• Project on social & national importance should be given to the interested TEQIP faculty
• Motivation
• By providing various platform like STC, IP conference on latest trend
• Faculty induction program provided by TEQIP in IITK like a dream comes true. There are so much experienced and senior faculties who guided us very well so I am overwhelmed with faculty induction program. I have learnt so many things for life long
• Clarity of scope
• Exposure to new areas/collaborative work with IITs
• Management issues
• Want to do post doctorate in cyber security domain. So if TEQIP allows me to do so
• By offering the practical sessions/hands on training of required softwares
• Provide list of problems
• In india that must be solved
• Data center remote access for research will greatly help in research as my university has limited resources and a bias toward permanent faculty we don’t get much
• Research projects also should be allotted to faculty members
• By providing access to IEEE sites for research paper, by providing research lab, by organizing lectures by experts of various places near to my institute on recent research trend institutes
• To allow us to attend national and international conferences held on different IITs
• Providing funds for participating in national & international conference
• Helping in improving library
• By making the system more free and comfortable to make academic easy
More than 70% of us are M.Tech qualified only. TEQIP can provide an opportunity to do PhD from IITs/IISc through QIP

- By giving permission or allow the IITs to provide some seats/vacancy for research in their institute
- Provide more flexibility for attending workshop related to my area in different IITs and provide accommodation
- Made available professors of my specialization so that we can ask advice from them
- By providing interaction facilities with IIT prof & lab and other research facilities in the respective college
- Provide us material & knowledge so that we ourselves develop in our college
- Helps in starting PG depts. In college like NCE
- By providing funding and grants to buy the required chemicals and instruments
- By providing us a proper internet connection & by providing us subscription of conferences & journals
- A subscription of journals needed in the institute for easy availability of research paper
- A chance to collaborate for research
- Leave(s) for attending workshops and lectures
- Easy availability of funds for applying for workshops
- By providing a chance to do research
- Please make available any collaboration opportunities from all IITs, IISc not limiting to just few
- By allowing or providing the facility of internet
- By providing infrastructure and time to do research in collaboration with IITs
- To provide a collaboration with IIT professors
- If TEQIP provide us a visiting faculty
- By making avail of the experts in discussion regarding the topic or idea/concept/title of research
- Providing easy contact to different IITs
- By conducting workshops in IITs and by providing the experimental setups in the college
- They should organize a short term course for every branch
- They can teach new technology
- By giving a chance to interact with IITK professors
- By allow us to go in several IIT’s for doing any kind of research on labs and compulsory publish paper (at least 2) on international journal
- By collaborative work
- Please make arrangements for our college students if they want to do some projects at quality
- Give some funding to develop basic infrastructure
- By providing basic facilities like e-journals and basic internet facilities for teachers & rooms
- They should organize a short term courses on things which we can manufacture like solar PV inverter design.
- They should prepare a small valuable courses for TEQIP candidate
- By providing access to some machines present in IITK which are rarely available in most colleges
- By providing guidance & resources which are not available in our colleges
- By allowing us to visit the institute in India or out of India in good universities/colleges
- TEQIP can support colleges to give us leave for our research work during summer/winter vacations. It should give us opportunity to use characterization facility available at IITs
- By getting research support.
- By providing funds
- Scholarship for small B.Tech students project
- By facilitating timely reimbursement of funds and granting funds to carry on research
- I’d like to collaborate to great professors appointment in different IITs to improve the quality of my research work. I need support from TEQIP to visit national and international institutes
- May be funding some project
- By funding journals paper, system software, internet ect.
- I did my M.Tech recently so I want to do PhD from a good institution like IIT, so that I can continue my research
- TEQIP can arrange research facility in IIT Kanpur
1. What teaching support you need?

- Books in the library for electronics and instrumentation.
- Projector, computers internet for lecture presentations (smart classes)
- Cabin furniture
- Proper space to sit with cabin
- PC with high speed internet
- Smart classroom (projector, mic facility)
- Smooth library facility
- Good books in the library of colleges and a system to maintain it with best books of our departmental core
- Smart classroom with high quality camera for virtual classroom preparations
- Internet in the academic premises
- Proper electricity arrangement in the laboratory
- Subjects to be taught per semester should not be too much
- Require all textbooks and reference books for all subjects
- Black board and projector
- Printer
- Funds for attending conferences, workshop, industry visit
- Classroom facilities like table bench chain etc.
- We need appropriate books in the library for the students and faculties. We need proper seating arrangement including chair, table and cupboard. Classroom should proper seating arrangement and will equipped with projector to formulate computer aided teaching.
- College administration provide to sit each faculty so that they can prepare their lecture and deliver in better way.
- Arrangement of small course work
- Suggestion of classic book and references
- Comfortable class room for both student and teachers
- Fans in classroom
- Podium
- 4th grade worker for cleaning the classrooms
- Sitting arrangement for faculty
- Three & four different publication book for each subject
- Computer with internet connection
- Proper distribution of load so that we can improve quality of teaching and research
- Fulfillment of demand for sitting space
• Necessary equipment: laptop, printer, internet
• Grant the demand for sitting place for work
• Teaching load must be in balanced way for proper justice with given subject
• Nothing more, if I feel stuck myself at same point, then I want the reply of mail from respective faculty, that how to handle this topic and what are the preferred references
• Access to online journals.
• Access to online courses.
• Guest Lecture from various reputed colleges.
• I need internet facility as well as projector in my class room so I can manage that class easily.
• I need common room for open discussion.
• Personal computer with high speed internet.
• Faculty development program at IIT relevant to the stream.
• Soft copies of the reference books.
• Access to the journals (Important).
• TEQIP shall create a source for the access of journals with login credentials for facility.
• Some webinar program & induction program needed during vacation, these thing will help us.
• For demonstration, lab equipment required.
• Proper Bench is required in classroom.
• Involvement in short term courses.
• Planning how to teach and complete a big, complete subject.
• Understanding what to skip and what not.
• Infrastructure in college, computer labs s/w related to CFD.
• Projector, computer, journal access.
• Computer with high speed internet.
• Smart class.
• Teaching recourse (Library etc.)
• Access to journals.
• Freedom to introduce new things.
• Access to YouTube, NPTEL, MOOCS, Brahspati
• Updated books in the library, with high no. of books.
• All stationary requirements such as papers, printer etc.
• Internet/Wi-Fi facility in the academic area.
• Nice white board/ good quality black board for every class rooms and projector to present some audio visual topics to make our teaching interesting as well as enhance the knowledge of students.
• I need to have a basic infrastructure which is not available this time.
• There is a need of regular monitoring of colleges by authority and a surprise periodic visit to the colleges.
• I need to have a information environment in or collages is there should not be any separation/diffraction in permanent and temporary / contractual facilities.
• Time to time training and information for our teaching difficulties required.
• We require to training to teach separately the technical subject and such short duration is not useful to gain in depth.
• Time to time visit the respective colleges and interact with students and then train us accordingly.
• The teaching supported required to work in our under developed colleges include a smart classes with projector, a PC system will high speed internet, essential Stationery.
• Good quality Book.
• Open access to good journals
• Regulars or easy support from IIT, Kanpur during final year project work.
• Our topic related, research papers & book will be enough. Even some guidance will be required with good suggestion.
• For Research, access to journal sites are required
• Software are required, like
• For performing the experiment proper getup is required.
• Encourage from IITK faculty to involve ourselves in actual DST on any small projects.
• Provide any project.
• Establishment of labs in college.
• Support from TEQIP for easily getting laboratories installed.
• Access to online journals.
• Helping the faculty in publication.
• Research labs
• Support for the high end equipment from mentoring insufficient
• Startup fund
• PG PhD. student intake.
• Permission for writing research personals for Host institute.
• If I will get a separate lab then I will continue my research through external teaching.
• Well-equipped laboratory with efficient amount of chemicals.
• Instruments to the respective labs.
• Teaching assistantship/labs Assistant.
• Computer labs with updated software.
• Bills for labs need to be processed quickly so as to provide easy access to research/lab materials.
• As a research support we need access to international journals support of technical facilities including use Ms, Le Ms, Dsc etc.
• Contingency grant for stationaries and essential things for research.
• Request for giving Phd/Mtech candidate to guide.
• Bank chemistry instruments find to buy IR, UV spectrometer
• Collaboration with IITs for Analysis.
• Research grant at least to buy basic needs
• Actually we are M tech qualified some of them are also Phd we are interested in doing phd so if you offer then this will surely help us.
• We require to expose to handouts and field visit to their how to get funding a write proposal.
• A good environment for teaching, along with minimum facilities.
• Sufficient books in the library, which cover the whole syllabus.
• Sufficient number of copy, pen and free classroom etc.
• There should be a healthy working environment-management should be supportive for our research and other academic work.
• I need proper space to sit with cabin, We don’t have P.C also so there are the following requirement to teach properly
• Provide a place in College where faculty can study, at least give one set of table & chair.
• Make rule of 75% attendance, so that student can come & learn, at least 60%.
• Well organized classrooms(Clean, projector, Board, electric bulb)
• Wireless audio device for lecture.
• Intranet and internet with WIFI.
• Balanced teaching load.
• Personal cabin (having table chair, cupboard, desktop)
• Proper electricity with backup
• Presence of students.
• Projectors and supporting stationers
• Proper books regarding Instrumentation specification in the Library.
• Sufficient Desktop (Computers), at least one for each student available in the laboratory.
• Sufficient Hardware Laboratory kits to carry out the experiments smoothly.
• Internet facility to be used is classroom while teaching.
• Proper functioning and access to library
• Internet connection (proper office arrangement)
• Teaching Assistant
• Library with refereed books
• Proper sitting arrangement
• Need software to monitor assignments properly
• Proper teaching training program
• Online attendance monitoring software
• Reputed books and PPT’s of various courses
• Personal computer with internet connection
• Some basic demonstration kits/support for development of kits for demonstration for some of the mechanical engg. Courses.
• Proper infrastructure in turns presentation facilities, lab facility etc.
• A good environment for teaching along with minimum facilities.
• Sufficient number of copy, pen and free classroom etc.

2. What Research support you require?
• Need space to arrange equipment and set up lab
• Infrastructure to set up lab
• TAs for lab
• Access to journals ASME, springers, t&F etc.
• Advance equipment like HPLC, GC, TA etc.
• Visit to world class branch related department so that we can get highest exposure
• Access to the papers, journals, and other research document
• Laboratories equipment with latest technologies
• At least 50 computers in the labs require modern software like MATLAB, PSICE, Lab view etc. so that student and faculty can be benefitted from it
• Proper guidance for publishing paper or transactions by TEQIP team or other supervisor
• Permission to write projects and get funds from any agency
• If possible IITs can admit us as part time PhD candidate, so that we can continue research work and be in regular touch with the guide.
• Just need a place to sit and enough time to read to do research
• Free access if sine repute journals
• Access to the IEEE, springer and all other major journals
• Grant access to attend conferences and workshops
• Necessary software for research
• Grant and leave for attending conferences and workshops
• Proper laboratory with latest equipment, journal paper, conference paper
• Digital library
• Permission for going IIT labs
• Good design & analytics software
• Funding for project
• Separate funds for research
• Introduce about the ongoing research topic and future scope of topic
• Provide guidance and discussion to take research topic according to their stream wise
• Assistance from the IIT Kanpur to carry our research like antenna designing, fabrication and measurement set up
• Computer center
• Computer labs with better configuration
• Access to some good journal like IEEE etc.
• Software support like MATLAB, LABVIEW etc
• Research library
• A computer along with the printer, internet connection etc.
• Permission to collaborate to the faculties from IITs, and leave without pay (for a Month) during the semester-break.
• License of some general Software like mathematica etc.
• We should be allowed for leave and vacation when there be no classes in the college for our presentation and conference.
• We don’t have enough space to arrange equipment & to set up lab
• We need infrastructure to set up lab.
• Access to journals advance equipment like HPCL, GC, Rheometer, TA etc.
• My research area is electrical machines & drives, for which I need a lab setup, which is not available in my college. So please provide me a lab support from god institution like IIT, so that I can do my research.
• Open source support for downloading of research papers
• A college website.
• Co-ordination and every type of support needed by mentor institute.
• Regular talk and guidelines by TEQIP and platform for seminar and workshops.
• One desktop (Computer) for each faculty member.
• At least one printer for each department in a college.
• Infrastructure to develop labs.
• Permission to attend workshop, FDP etc.
• Finding for various equipment
• Lab assistant
• Peon (for cleaning)
• Generator set (to deal with frequent power cut
• proper research oriented library
• Plagiarism software / Grammer chapter
• Fund for attending conference and seminars.
3. What lab support you require?

- Proper infrastructure to develop lab
- Set-up of computer-center where students of all department can access computer to enhance their knowledge by using internet
- In computer lab all systems should be capable to run the code which are used for completing B.tech. Courses.
- Some basic equipment
- Require technical assistants
- Adequate number of computers
- Software: windows, Linux, Office etc.
- Proper supply of consumables lab staff
- Latest lab instruments with proper manuals
- Well trained lab technicians and instructors
- Infrastructure (there is only one lab in which all the labs are running) in IET Bundelkhand Jhansi
- Lab staff (lab technician) who can help in performing the lab experiments
- Seminar room, server room, chair table etc.
- Being an electronics engineer I require labs equipped with various kits CRO, DSO which we have in our institute. But computer center is missing and also on dedicated computer lab with at least 30 computer well equipped with some useful software like MATLAB, CST Microwave studio
- In lab there must be enough & well in term of configuration system be available
- Let us allow to use the Kanpur lab for research work if require
- Each subject has a standard lab setup
- Technical lab assistant
- High quality lab for purpose of research and future scope of students
- Proper maintenance of old equipment which are already installed in the lab
- New equipment and machines
- Lab setup for environment engineering and transportation engineering
- Lab assistant in sufficient number; latest equipment, proper lab infrastructure
- Licensed software
- Fulfillment of the requirement of the licensed software
- Laptop/system and a cabin
- Access of useful portals which are being used at IITs. It will be nice if we can get some set up assignments department wise
- Basic chemicals/instruments to the UG/PG level
We understand that it is our duty to develop the labs it is my request that the requirement we order including instruments and glassware be processed quality. This will encourage us to develop further

- Support of technical facilities and an air conditioned lab support of basic necessities. Space to set up a lab requirement of various chemicals. The assistance should be directly from TEQIP
- Work space lab technicians to maintain the lab
- Water and electric facility
- High end equipment
- Basic safety needs, fire extinguisher, eye watch station, refrigerator to keep chemicals
- Some of the instrument is not available which I already mention in our college & hope they will provide us that equipment
- Advance computer
- Need some training on advance/modern equipment like total station, AAS, GC, GCMS etc which is mostly possible in IIT Kanpur SDRF FTIR
- To train with advanced instruments and organize such training separately
- Lab assistants appointed though TEQIP
- Place/space for developing laboratories
- To access the analysis exp. At IIT Kanpur through proper channel.
- During our project lab instruments may be required that we will have need.
- Equipment as per the syllabus.
- Explanation of how equipment work practically.
- CFD related S/W with computers.
- Labs setup in the college CD.
- Support from TEQIP for permitting hardware in long time taken by got institutions in passing the files.
- Centralized TEQIP user Id and password to access journals and consult them for any kind of questions
- High end equipment’s.
- To get good project from DST/MOFPI/MHRD
- Try to help for qualifying the GATE exam to B. tech students.
- To improve our teaching style so that students get benefited more. Some research paper I would have to publish as well consult works have to do in our college.
- As I well be in teaching so PHd is required so next goal is to pursue PHd program
- Development of the college and students.
- Gaining lots of experience as a teacher
- Placements
- Startup
- R & D projects from DST/SERS/BT/UGC CSIR.
- Optics instruments for example Spectrometer etc.
- Lab attendants’ issuing for the Instruments for the printer connection etc.
- Sufficient number of general physics apparatus.
- There should be proper infrastructure and lab and building.
- Proper Infrastructure to develop lab.
- Some basic equipment.
- For lab at least one lab technician& one peon is required.
- Provide a good instruments for lab, which is recommended by good institution.
Lab rooms
New device to be purchased to set up labs.
Sufficient computers to teach students (required for hands on software labs.
Control system Lab
Networking Lab
Power system and protection
Proper demonstration on various Lab equipment
Enhance the quality of technical education
Develop proper lab in our college
Demonstration of all labs or machine available in the institute (respective branch)
There are machine in labs which are not being used for long so they are not working now due to back of maintenance. So phase replace that or repair.
A computer Lab with software like MATLAB mathematics etc.
Optics instruments for examples, spectrometer etc.
A lab attendant for issuing the instruments during the practical.
Sufficient number of general Physics apparatus.
I want the total information about language lab. I require equipment related language lab

4. What is your vision for next 3-year?

- In the next 3 year, I want to prepare my students in such a way that they can survive at any place, as their choice
- I want to enroll myself into part time PhD student I can continue the research
- Make the foundation to do research
- Self-motivate and motivate the students for learning
- Try to improve the posting system of allotted institute
- Motivate the students for all aspects of education
- Emotional support to the students in their educational improvement
- Motivation to the student in the research area
- Research as well as industry expose to the student
- To enhance the quality of student as much as possible. Set up the laboratory create the learning environment in the college
- Create environment for research and start up in between the students
- Create proper environment for technical education in college motivate to student for research type work and build up confidence of student for start up to make technical sound connective and creativity inside the student
- To improve the teaching skill and confidence
- To improve the student capabilities & prepare them for getting good jobs
- To give 100% for improve college and my teaching skills so that offer 3 years I can get new job easily
- To improve the quality of student and we try to provide technical practical education to student so the student create a technical environment and also improve the lab facilities in our institute. We try to co-relate the theory with practical for good learning
- Select a topic in aerospace engineering regarding aerodynamic modelling using finite element method and do research in this
- Publish papers and attend conference
- Teach student in such a way it will help to change the student perspective in the field of research
- Publish research paper in good journal. Improve quality of education
- To make good understanding of whatever subjects I am going to teach. Encourage students to do some research and motivate them to come to IIT Kanpur when required. Given students a facility of good teaching and real engineering.
- Teaching students with proper guidance given in IIT Kanpur
- Participating students in lab for experiments
- Make effective the classroom teaching
- Motivating students for GATE/PSUs
- Enhance quality of projects
- Want to enroll for PhD part time
- Will try for a permanent job somewhere where my future can be secured
- To develop the institute lab facilities and research facilities
- Establishment of food testing laboratory
- Encourage students for GATE exam
- To secure permanent position in any NIT/IIT
- To be satisfied professional
- My next 3-year goal is to motivate student at such a level that they attend all the classes. Also to teach such a manner that make them employable. I try to deliver theoretical, practical and industries knowledge in students
- First goal is to stop the students outside the college for preparation of GATE by showing good teaching skill & content
- To set lab that can conduct experiment in B.Tech level
- Start writing own projects
- Help to start PG program
- Permanent position
- First we need to know if their job has any future for life & career if the job holds uncertainly us it holds now (as the job is non-renewable) the motivation one requires to develop academic & research skills will be facing. The person’s conduction will be diverted instead to search for new opportunities. In short, the biggest question is “what happens to us after 3-year”
- First to establish a good academic environment in the respective fields. Focus will be given to start the PG program very soon. Later try to establish research oriented program as well as to promote research through various projects and program in the respective universities
- Since I have completes 1.5 year Post doc in physics from Helmholtz, Germany at the age of 28. I have 3 years goal for the following –
- To learn how to deliver good teaching to the UG Students.
- Building a meaningful collaboration in the field of experimental quantum optics (ion-trap) across the country.
- Search for the permanent position as Assistant Professor at the end of contract.
- To improve the quality of education.
- Develop student academically, should be able to apply the knowledge for betterment, prepared for Competitive Exams GATE and others.
- Develop laboratory for smooth functioning.
- Develop proper system in department
- To get accreditation.
- I love teaching & research, so I have no doubt about my future goal will continue my teaching & research work.
- To give and do my best for students, department and college
- My aim is to be as best faculty
- My strong will to do PhD and all things to be a good academician.
- I want to organize the event in the 10th and (10+2) classes of school if TEQIP support.
- Stimulate a student so that he himself starts learning a subject.
- Demonstrate a topic with practical example so that the subject become interesting to the students.
- Focus more on the recent evolving topics, so that the students are prepared for the upcoming jobs.
- Teach a student in such a manner, so that he takes more interest in joining research courses.
- Process identify research interest
- Become a better teacher, (improve content and delivery of lectures)
- Take up challenging projects
- Keep learning continue and guide students Properly
- Develop at least one lab that help UG level students
- Provide proper support for accreditation
- Increase Gate qualified students
- Support to enhance research publication.
- Enhance the quality of technical education
- Develop proper lab in our college
- I take this opportunity as something that would shape my cases and in reach mu knowledge
- Since I have completed 1.5 year post doc in physics from Helmholtz institute Germany at the age of 28. I have 3 year goal for the following
- To learn how to deliver good teaching to the UG students.
- Building a meaning full collaboration in the field of experimental quantum optics (ion-tras) across the country.
- Search for the permanent position as assistant prof at the end of the contract.
- I want to set up the language lab use it properly publish some paper’s edit some books . to improve the quality of education in respective college.
- Develop student academically, should be able to apply the knowledge for betterment, prepared for competitive exams, GATE and others
- Develop laboratory for smooth functioning
- Develop proper system in department
- Get accreditations
- Focus on GATE syllabus which we can incorporate in the main syllabus of the university
- Motivate students so that they can extend their future career towards higher studies and research towards IIT’s, NITs, IISc. And industrial jobs in India and abroad as well.
- Minimum criteria of 50% students selection in the GATE examination so that they can get selected in M-Tech. programs at IITs, NITs and institutes like that in 4th year itself.
- To give students clear concepts about subjects I teach
- Motivate students in the field of science & Engg. So that they go through the basic concepts of the subject so that they get good outcomes.
- Motivate students to pursue research
- Make student level equivalent to GATE
- All students placed in good company
- To improve condition of my institute (lab, classroom, attendance, result etc.)
• Work in the field of GATE preparation for students so that they can go for higher study in college like IITs, IISc, NITs
• I will work to set-up “start-up” cell in our institute
• Try my best for students so that more than 50% students can crack GATE in their final year and each year I will try this figure to improve with better rank
• Software to upload online attendance of students
• Enhance conditions of labs and classes
• Motivate students towards Government jobs, PSUs and GATE exams
• Increase number of reputed publications for college
• Develop new ideas in every student
1. What teaching support you need?

- Refresher courses on a regular basis at prestigious Institutions
- Smart Classes
- Projectors in the classroom
- Small electrical devices such as 14 GB diodes , insulators for demo purpose
- White board and markers, Dusters etc.
- Power backup in the classrooms to run projects.
- The course content which IUST have for B.Tech course have more contents of metallurgy, chemical Engineering rather than the topics of organic ,inorganic, physical chemistry ,having biological. Material and other applications
- Personally I feel the course content should be changed to remove few of things and other topics which students find interesting.
- Better Resources
- Infrastructure for recording lectures
- Visiting faculties from IITS / NITS to deliver special lectures
- Teaching support needed from IIT Kanpur in form of training , materials and continuous support
- Good Infrastructure such as regular electricity projectors in classrooms
- Access to electronic documents / Books / articles
- Smart Class system for students / Projectors facilities
- Demonstrations aids wherever possible
- Access to e-document
- Smart class system, or at least aid to switch manual blackboard teaching & usual video assistance.
- Demonstration aids
- Training programme sometimes similar to that of present one
- We should be included in all the meetings regarding applying the department in various aspects so that we should present our point of view
- For better lecture preparation a desktop / Laptop along within a 3- in-1 printer
- For keeping our self up to date annual grant for purchase of books and other stuff
- If possible support for engaging students as TAs.
- I need good resources (Books, Online courses) etc such that the students got the best.
- Orientation / Induction programs so that we easily geter updated about trends development in teaching,
- Facilities like PPT / Access to good libraries.
- Efficient online support
- Licence for software like MATLAB, ABAQUS, SAP200
- TA support in whatever way possible, since we do not have a PG program yet. Sound absorbing classroom walls they echo a lot.
- Availability of professors of IITK for interaction in person or email or phone to employ best practices in teaching.
- Support on developing an inclusive curriculum for the students
• Availability of projectors in class rooms for PPT presentations.
• We need certain refresher courses like ‘Mathematics for Computer Science ‘ and others
• Courses short term computers and fundamentals
• Refresher courses should be conducted at IITS in regular intervals.
• New topics should be included in the refresher courses so that we can add them in the syllabus.
• I think the workshops like this faculty induction program prove very helpful and should be more frequent. There should be a provision to sit in the class of some expert from IITS to get more insight in teaching. Moreover, need smart class rooms loudspeakers use.
• I think we need to have workshops related to machine learning and various new technologies so that we can be updated with latest.

• Black board should be replaced by white/green board and in few classes. Smart board should be established.
• Projector system should be installed in most of the classroom.
• Proper eber for with computers and other accessory items should be required.
• We need computation labs for which we require different software’s like mat lab R-soft numerical software.
• Need for personal desktop computers for each faculty proper sitting arrangement.
• High speed internet facility with computers/laptop.
• Computer operator
• Printer and scanner
• Teaching assistant for tutorials/labs.
• Access to online e-book and e-journals.
• White board/green board in classroom.
• Good work shop should be conducted at the college learn so improvement should be calculated.
• The no. of real world examples which connect the theory and some setup which can be shown in the class itself.
• Caller ID may be provided for classes with larger strength separate cabin may be provided to each faculty library should be accommodated with more number of books, teaching materials.
• Need of standard books in library.
• Students visit to IIT/IISC so that they can get motivation.
• Need of TA’s.
• We need mutual cooperation and interaction with the faculty member at regular for each specialization.
• Our students can attend workshop gain courses in IITs.
• Lecture/workshops in own institute by top universities faculty.
• Internship program of our students in IITs/IISC/IIEST/NITs.
• Workshop and seminar by experts in their domain.
• Frequent seminar on humanity and engineering ethics.
• Motivational lectures by the professors of top institute.
• There should be computer system along with internet connection and projector support system.
• A separate cabin and white board in the cabin.
• Computers system and projector.
• Relevant books in the library.
• Computer with good configuration and printer, Xerox machine.
• Contingency grant.
• Infrastructure for recording lecture.
• An associate projector in CSE department to start M.tech.
• One cabin with basic facilities like (chair, table, book self-e.tc) where I can seat and meet the students in office time as well as do some work.
• Some basic stationery facilities like (marker, registers, pen, notebook etc.)
• Projector and PC/Laptop.
2. What Research Support you require?

- Access to e Journals
- Funding and visit to state labs
- Small Budget supports (say 10000) for UG projects.
- 50,000 per teaches for setting his own experimental setup for his own experimental setup for conducting research and publish papers
- Support for attending conferences and short term courses such as GIAN.
- Research support in terms of projects and instruments that can be used to carry my research work, besides academic activities. So later by publishing this research in terms of articles or patents in going to give credence to institutes as well as myself also.
- Mentoring about new technologies
- Require research support in form of personal computer, microwave circuit simulator HFSS network analyser and spectrum analyser and PCB fabrication facility.
- Research grant to start some project in the area of wireless communication
- Honorarium for presenting and sharing our results out comes
- Software subscription and reliability
- Permission for research projects.
- Orientation with various elite food tech institutes so as to get aware regarding facilities available in the country (Induction towards various fields of research)
- Small project/research grants for R&D/equipment design etc.
- Small research grants for maybe equipments design or development.
- Tie up or MOU with other institutes of country
- Procurement of equipments that are not at present & technical staff available for carrying expert’s research.
- Appropriate infrastructure in the labs pertaining to the practical work we do
- Chances of collaboration research
- Using research infrastructure at different IITs and Institutions.
- Lectures by experts on various research areas and regular workshops.
- Financial support should be provided
- We should be provided enough space to collaborate our research with other institutes.
- Financial support should be provided
- We should be provided enough space to collaborate with other institutes.
- Need a good computing node (TITAN XP)
- Access to journals.
- I want to be present or allowed to attend the conferences/Seminars etc.
- Opportunity for collaboration research.
- Access to Journals
- Courses and workshops for the interested field.
- Faculties from some prestigious institutes should be available to help and discuss.
• From IUST no involvement in administrative work so that we can devote time to research activities. A PC, desk and a permanent place to sit and work, make UG students work in our field of research.
• From IITK Faculties with similar research interests to share ideas and help us chalk a path for research activities.
• Access to the lab facilities of IITS and BTP
• Provision to do internship for student and myself
• Work station
• Access to some journals.
• Access to some latest research tools/ Software / journals.
• Collaboration research with IITs
• Guidance from IITs in the respective fields.
• Access to online digital libraries (like IEEEXplore) and other standard journals.
• In research support we need to have collaborated guides from IITs and need have workshops on technical report writing.
• Change of library and lab timings.
• Access to major reputed journals, license of anti-plagiarisms formerly should be required.
• High performance computing facility should either be established or the institute should collaborate with reputed institutes for the same.
• Institute should advertised vacancy in PHD.
• Visit IIT/NIT research lab.
• High performance computer center should be established.
• Improvement of laboratory facilities.
• Better library with access of all e-journals, books magazine.
• Sponsorship for attend STC/workshop/national and international conference in India or abroad.
• Workstation with state of art configuration.
• Need access to IEEE like sites to access research paper.
• Access to do collaboration research with premiere institute of the country.
• Increase in library timings and license of important journals.
• Establishment of research Centre with the help of reputed institutes.
• Finding also required to perform the research without any hinderer.
• Collaboration with the projector from different IIT should be enrolled.
• Access to down loads the journals.
• Find with easy process to setup the experimental setup.
• Provide funds for conducting research and provide advance equipment’s.
• Need of personal cabin/Room in dept. for 24x7 hrs. Access.
• Need of personal Pc and journal.
• Access of journal and Research articles.
• Funds to set up experimental setup.
• Access to download journals.
• We required generally that advanced research support that is not available in our institute like computational heat transfer lab.
• Access e-journal library.
• Requirement need of basic engineering software’s.
• PHD admission of faculties (having M.Tech. only) in IITs/IISC.
• Membership of IEEE.
• Latest book.
• Provide handbook on different areas for each department.
• Equipment and machineries for the research work.
• Support from IIT professor to help us on certain points for research.
• Vibration analysis lab apparatus like different sensors i.e P-u probe accelerometer sound measuring instrument.
• Motivation from the head of department.
• Faculty should not be over loaded in terms of administrative tasks.
• Research grant or grant for small level projector.
• Access to IEE Explore, science divert journals, etc.
• Collaboration with IITs/NITs for carrying out research.
• Research in accordance with geographical area to ease by their.
• Support for our ongoing PhD. Works.
• High configuration system for Big Data.
• Internet connection through LAN or Wi-Fi.
• Access of different journals and papers of reputed publishers (e.g IEEE).
• Software’s and training or workshops time to time as per the requirement.
• Library equipment with access to e-journals and books.
• Personal cabin and laptop.
• All-in-one Printer.

3. What lab Support you require?

• Proper Internet connectivity and necessary tools and other equipment.
• Basic equipment such as CRO, Programmable DC Supply, FPGA board, capacitors inductors, PCB printing facility.
• License version of MATLAB-18 software
• Xilinx Software
• FT-IR spectrometer
• Fluorosence Spectrometer
• Rotavapour
• Magnetic Stirrer
• Heating Plate
• TGA Instrument
• UV/V spectrometer
• Sonicator balance
• Weighing Balance (Digital)
• MP Apparatus
Microwave circuit and antenna design lab support and embedded system lab support and embedded system lab support.

I require support from facility or lab staff who establish microwave eng. Lab, so we install in IUST best lab in area of antenna design & microwave engg.

GC Instrument
New Technologies
USRP devices for conducting real life experiments.
Punctual lab staff with working basic equipments
Power backup and basic equipments like consumable
Efficient Lab staff.
Satisfactory guide all the students I get during the tenure
Table top experimental units
Appropriate technicians in the labs pertaining to different areas
Lab infrastructure in terms of equipments
Electricity and basic amenities.
Requirement of chemicals 7 providing opportunity to access the labs of other Institutes where the lab facility is available especially in CFTRI, IICPT, UICT Mumbai in food technology area.

Need FPGA Kits for computer architecture teaching – Practical experience
Purchase / selection of modern equipments.
Practical training to my laboratory staff.
The best and sophisticated lab equipments.
Help in purchasing lab equipments.
From IUST labs are well equipped. All I need is time to devote to my activities, both teaching and research. I would also discourage purchasing any licensed software’s at this point open source should be encouraged.

From IITK ease to access to your labs, support for students to work in your labs, on projects as well as in using your equipments, share ideas, collaborate.

Information about the prices and brands of equipments for procurements.
Tips & advices from time to time for developing labs.
Would like to know the best suppliers name and better equipments
Lab manual preparation.
Optical bench, mounts, prisms & other optical components.
Workshops should be conducts which can help in setup of advanced research laboratories in the institutes.
We need some labs selected to the fields of CoA (FPGA) Image processing, image processing, high performance computing and between selected to data analytics and cloud computing.
In labs we need have various software’s and kits for practical training of students.
Maintenance of lab facilities.
The laboratories are in need of modern equipment’s.
The labs lock base infrastructure.
Well equipment computation optics and photonics labs.
• Real time systems that developed by students.
• Need of supporting staff in all lab.
• Maintenance of lab facilities periodically.
• Lab Instructor/Assistant in lab of ECE.
• Mat lab and mathematica software.
• Need research lab to extend the research and to motivate the student for research.
• Beside basic level labs, access to high precision and sophisticated facility in premier institutes.
• Lab assistant to demonstrate the experiments in labs.
• Good funding so we can buy modern equipment for me lab to give the good exposer to the student.
• Time to time visit to the college to check the what the equipment are in lab and however of it working.
• Lab working modules raw materials.
• Visiting to labs so that enhancement in labs can be done.
• Existing instruments which are out of order can be made functional.
• Lab assistant for taking care of lab and machine.
• Computer labs should be open to students for 24x7 hrs.
• Need of modern equipment’s.
• Raw material at time.
• Working models.
• Lab attendants.
• Renewable energy and IC engine lab.
• Up gradation of lab instruments like analog to digital and many more.
• Advancement in existing lab.
• Machineries/equipment’s of many lab of mechanical engineering Dept. should replace completely.
• Proper manual for lab course work.
• Few models are available for machineries which are bigger in size go please provide some industrial visit.
• Theory of machine lab and vibration analysis lab.
• Well trained lab assistant.
• Apparatus should work properly.
• Infrastructure to set of robotics lab.
• IOT lab set giving training to students of all batches.
• Only two lab with few system, so more space required to open new lab.
• Kits for computer architecture lab.
• Lab equipment’s based on the subject.
• Basic facilities like chairs and table which is available in most of the lab but require in some.
• I able to ask for some equipment’s if required in later stages.
• PC for students.
• Headphone with mikes and furniture.
4. What is your next 3-year goal?

- What I want for the next 3 years is to enhance my teaching skills and develop an aptitude for research and consistency to put my best forward.
- To get 2 patents in the area of research
- 4 paper revived, 6 conference papers.
- To develop myself as a good and effective teacher
- Complete my PhD which is submission stage
- To get a least one research project from DST, SERB as young scientist
- To supervise at least 10 research projects to UG and PG students.
- The target that NPIU Has set for us, I will try my level best to achieve that target for my institute.
- First of all I want to maintain that B. Tech students won’t be interested in pursuing their projects in synthetic Chemistry / material chemistry, though some pursue projects in physical chemistry for some computational work.
- Improve teaching experience and gather opportunities to undergo training.
- To excel in teaching & research improve fundamentals understanding of core courses.
- To set up research lab “Communication Control & learning lab” wherein cutting edge research lab is carried in area of communication, stochastic control 7 machine learning data analytic.
- To become a good researcher by increasing no. of conference journals
- To become a good teacher by involving in all activities related to student improvement in studies.
- To make good policy in our appointed college in all areas of engineering.
- As decided in NPIU I will be focussed on DLIs of the NPIU, additionally I would like to use this opportunity of engagement with TEQIP III to do some research in my field. Hence use this platform as a drag for future aspirations
- Publish research papers, Book etc.
- Work on some innovative path breaking & significant food technologies.
- Update myself with the latest trends in food technologies
- Imparting education at par with international standards.
- Prepare the students for GATE.
- Emphasis on the development of conceptual framework and lab expertise in the concerned subject of teaching.
- Development of Research temperament to my required academic area of my teaching.
- Providing students the exposure to different avenues that are available after the completion of their course.
- I am currently pursuing my PhD from IIT Mandi, hence my goal is to complete it. However I plan to complete it, however I plan to complete it in such a way that small projects are given to students as final year project.
- Being an alumni of IUST, I would like to ensure that difficulties I faced during my graduation are not faced by my students.
- I will be changing the teaching methodology, so that student gets benefitted.
- I will try In overall development of my department and Institute as well.
• Get accreditation of courses in the department.
• Teach students and help them to learn the subject.
• Increase the overall performance of our department academically.
• To provide students good lab exposure.
• Smooth functioning of the department.
• To avail them to go for internships to some good Institutes, industries or if possible abroad.
• My immediate goal was to enrol for a research program. But since TEQIP happened. I would like to devote my full energy towards help it consolidated and deliver results. But as this is a time bound program, I would ensure during this is time bound program, I would ensure during this period I interact with faculty from my area and help myself plan a research program. Again availability of professors should be ensured, not only at IITK but other IITS as well as IISCs.
• Guide the students to choose their career and motivate them to pursue higher studies.
• Help my department to get accreditation and get involve in the process.
• To evolve myself as a good teacher and administrator
• Want to do a project with students of their own interest, so that both student and my university get benefitted
• Want to do some research in my own area of interest.
• Want to apply the way of IIT prefers to teach the students.
• To work on my teaching skills.
• To publish good quality research papers and to attend conferences
• Enrolling myself in PHD as earliest as possible.
• My first and foremost duty is to contribute for my institution which can be achieved by improving the academic & research capabilities of our UG students.
• I should work on meeting the objectives and goals of firstly our department and then the institution.
• I would like to work on some research projects of CNs Domain.
• For next 3 year goal I want to train students for gate exams and latest technology, softwares. So that my students get settled at the best places and have better future.

• Working with the institute for overall development and improvement of the college.
• Teaching by experimental demonstration.
• Making the present institute competent enough in academic as well as research fields.
• Better curriculum related to industry need.
• Provide support for getting good rank in Gate exam.
• Practical implementation of subject related to daily use /industry exposure.
• Writing book and organizing conference.
• To start part time PHD.
• To setup start up lab.
• To create state of art lab and it’s manual.
• To motivate the students to improve their technical skills.
• To motivate the students to prepare for exam like Gate/ESE.
• To motivate the students to learn engineering by practical method matter than theoretical method.
• To take the college to the academic excellence.
• To improve the quality of PG course in the college.
- To do quality research and improve its standard.
- Making the institute competent enough in academic and research field.
- Innovation research publishing papers and writing books.
- To give my best to improve to the student knowledge and help the college to get accreditation.
- With new idea and research related activity I want to provide good fame to the college.
- Accreditation
- Making faith in student that really engineering meant for them.
- First focus to solve internal problems inside the institute to make academic environment.
- In next 3 year I would like to focus on both classroom and laboratory teaching. I would also focus on Gate related questions while teaching. I will also focus on program educational objective to fulfill student’s objective. Apart from that I will TEQIP myself with more teaching materials, so that teaching can be enhanced dually under given time frame, I would also focus on some research activities involving students so that they can also get the assure of research activities.
- To bring quality education MIT Muzaffarpur.
- To enhance the teaching and soft skills of students.
- To enhance the knowledge of myself and hence students by attending conference/workshop in IIT’s/IISC.
- To being outcome based education.
- At least 10 of my students should get admission in repute college/institute at India for higher education.
- Publications.
- At least 5 subject should be proposal effecting so that student will benefit.
- Enroll for PHD (part time / full time if TEQIP will provide some scholarship).
- To enhance the technical and teaching skill.
- To initiate the research project as soon as possible
- Develop the technical quality of students.
- Try to improve un-functional lab instrument into functional state.
- Improve the knowledge level of students.
- Train them to be a good engineer.
- Make them aware of technology and innovations happening arms the globe.
- Guide them to become technically efficient for our industries.
- Provide on campus placement.
- All course of my college where work wants to Accra date by NBA.
- Placement of students in industry.
- To increase the percentage of qualifying the gate exam.
- Team work for making beautiful.
- To improve lab quality in my college.
- To engage students in lab and carried out different project.
- To carry out project with students which will helpful for society.
- Let IUST be the hub of Gate preparation in the coming days.
- Let it be accredited.
- To get our department accredited by setting up new labs, etc.
- To make students quality for Gate.
- To publish paper in referred journals.
- To explore new areas by doing online certifications.
- To enhance my profile by doing workshop summer/winters at IITs and other things.
• My goal is to contribute effectively to accomplish the TEQIP-III project goals.
• Make students able to analyses the problem and come up with some short of solutions and I want to in courage them to analyse not to memorize.
• I want to see their strong basic after 3 year because currently the students have little bit lack of basic concepts of the subjects.
• My goal is also to improve my knowledge eligibility and value so that I can continuously develop myself as well as the others.
• To work for student development.
• To get published articles in international journals.
• To present papers in international and national seminars or conferences.
• Do some projects founded by UGC or other such reputed organizations.
1. **What teaching support you need?**

- In theory part related to lab experiments and its applications.
- We should start open elective course for giving extra knowledge to other course.
- Please arrange interaction with the Prof. (As we are attending like in TEQIP III interaction session) after every 6 months so that we can improve and get the insights of subject.
- Laboratory visit and in developing simple experiments to relate theory and practical (Not necessary practical curriculum)
- To be independent in teaching in our way. Since the college us autonomous I should be able to create my own teaching curriculum.
- Proper seating with stationary and printer’s access.
- One point contact where we can clarify our doubts and receive updates information regarding TEQIP because right now queries are being deflected one place to another.
- Basic amenities: seating, desktop, internet connectivity, books, pointers, markers etc.
- Either the student’s size in a class to be decreased or provision of a microphone.
- Subject specific workshop pertaining to civil engineering department.
- Better availability of books.
- E course.
- Basic course books, study materials and online sources should be provided to students and facilities expert lectures procession should be made.
- Content material for theory part.
- Question bank along with their answer.
- Internet, projector, training, workshop.
- Some E-book related to every topics of U.G. course work.
- Online journal helpful in teaching.
- We need proper amount of good books in library of good writer. So matter if available so that quality of understanding increases.
- Online lecture and tutorial.
- For teaching all thing is available so no more need.
- I need workshop and short term course at different intervals.
- I need access to the online journals research papers.
- I also need different books available in library for teaching the subject.
- A direct connection with NIPU(TEQIP)
- Internet facilities.
- Stationary and sitting arrangements.
- Desktop and printers.
- There should be available the projects based on syllabus an online platform.
• Video lectures in digital electronics, basic electrical engineering From IITK.
• Lectures notes in digital electronics From IITK.
• We are getting order by our HOD to engage classes of reg. Regarding this should be avoided.
• TEQIP strictly ask institutes to free us & total involve in teaching and research & lab setups.
• Teaching model is required.
• Projector
• Class room Projectors, Access to E- resources like aces Papers. Laptops & printers essentially help us to exclave new things in internet .for giving hand on note would require printer & paper bundles please arrange some fund for individual to buy of those.
• Library, Departmental library with some new books in particular areas.
• Projector in classroom for better understanding on topic.
• There should be available the projects based on syllabus on online platform .by seeing it the rural students also can connect himself with the application part of that syllabus
• Small fund for developing project for students.
• Recourse for E-journals & E- books.
• Financial supports for purchase of books are teaching material.
• Visit in research labs and industry.
• E-course certified course to update and increasing the present skills and knowledge.
• Support of host institution etc. In order to provide teaching material to students.
• Books in library, seating space for teachers (TEQIP-III).
• Proper & even distribution of work load.
• Subject & labs allotment should be even.
• I need to understand more about quality teaching, assignment preparation and evaluation.
• Arrangement of sitting plan on college.
• At least one computer printer paper & stationary item should be arranged from TEQIP or college.
• There should be support for good books in library in order to improve education quality.
• Basic facility like drinking water internet should be provided
• Library and other study material, teacher facility induction workshop of regular intervals so that I would be able to improve myself by keeping the fact in my mind that this pattern of teaching is followed in the IITs.

2. What research support you need?
• Software, lab research papers system, internet.
• Teachers are not available in my College I want to send the students in IIT Kanpur of the project.
• I recently completed my M.Tech so I want to join PhD in a good institution.
• Guidance of a reputed professor
• Journal confusion assistance, guidance & suggestion professors for new research area should have a chance to interact & with them over the research topics so that discussion i can get better ideas & sprit for some paper.
• Funds for lab development.
• Basic infrastructure for research.
• Access of journals and E- Library.
- Lab facility should be provided.
- An order to carry out research.
- Chemicals required for particular project.
- Basic support for instrument.
- I like to collaborate some great proper of national and international the report and to visit their labs. To understand better the concept related with my interest.
- Enrolment in any IIT for PhD.
- Collaboration with IIT's Industries for faculty & give platform to students for internship & doing minor projects. Access of scifinder and internet facility.
- Some of the journal & conferences subscriptions.
- I did May research in competitive and developing compression molding machine for preparing composite. I am also having interest in mechatronics area but not have adequate knowledge.
- Require basic & advance knowledge of mechatronics.
- Material to develop research lab for composite material development.
- I would like to collaborate with the IIT or IISC to create a research proposal which if approved by TEQIP can be funded as needed.
- Access to journals; subscriptions by institutes for freely download papers.
- Funds and leaves to attend workshops / seminars.
- An opportunity to collaborate under export guidance either for projects or for PhD.
- Expert talk in our interested area.
- Programs to improve technical knowledge.
- Access to significant publishers journals like IEEE. Should be provided to faculties and students.
- As there as no infrastructure available in the college, so we should allow continuing our research with the IITs or the comfortable place available with the candidate.
- I need internet technical & financial support to experimental research.
- Provide us research article by open accesses.
- I want to do research in hypersonic field. So i need monthly support for conducting experiments at IITs Bangalore and technical support from different professors of IITs related to this field.
- I need a short term course on power system stability.
- There is no basic infrastructure .we need help to develop basic laboratory. Please allow to do our research at IITs at least in summer break & winter break .loooking the best collaborative reason in work.
- I need a short term course on Designing of solar PV. So it could help everyone in many way and many more these type of short term courses based on solar technology.
- Accesses to journal for downloading quality research papers.
- Need permission to visit & collaboration one of the institutes outside of India. Provide the TA, DA for contingences.

3. **What lab support you require?**
- Lab equipments & infrastructure.
- Lab attendant or technical stage.
- Many of the experimental set up are not in working condition .so some reappearing is required ( partially of fully )
- The theory subject and lab of same subject should be attend to one faculty
• Modern equipments.
• Well trained lab staff.
• Advanced lab to carry on research in cutting edge areas.
• Provision of adequate lab infrastructure.
• Introduction of new experiments along with existing ones.
• HPC, Workstation.
• Basically for development of lab, many instrument /Setup are there but is not functioning well. Lab instructor / technician are insufficient.
• Seed money to by small equipments.
• Access to research journal.
• Software for data analysis.
• Teaching assistant, lab technician.
• Lab assistant for UG –Lab ( Physics )
• One small research lab with some essential equipment.
• Access of software like Mathematica, Mat lab &Maple.
• Many lab equipments are not there.
• I want to establish fully furnished workshop on solar technology. So need a regular short term course on every as port of solar technology.
• I require proper power system lab include all the latest software.
• Need of update computer which can fulfil prerequisite things which are need to install numerical software.
• Lab are getting very old & not in working conditions, so provide new testing.
• Would like to give some under graduate project hence required some funding to buy some basic staff.
• Manufacturing lab.
• I need propulsion lab. If possible.
• I want like to set up wind tunnel for subsonic study.
• Basic lab facility needed to conduct experiments at UG level.
• My work is in the field of solar energy & there computational & experiential analysis so I will make some to there is availability of licensed version of analysis software will be there.
• We have basic lab facilities for B. Tech labs related only to the titeration experiments
• We wants to build the lab which are there course related only other experiment they are taught theoretically.
• Some basic lab facilities we also require which can help us to restart some of our research work with teaching.
• None at present as all the existing labs in Mechanical department are functional. It will help if TEQIP can create checks and balances to ensure periodic review of utilization of funds for lab upgradation, renovation etc.
• The basic software and equipment should be made available.
• I required raw material to develop or prepare composite.
• For testing composite we can use your lab if possible.
• Programming labs with lab assistant & all the required research a7 software.
I like to modernize the lab instruments and a better involvement of faculty members to generate interest among the students.
There is no N/W lab in my college. So infrastructure should be proper. I proper guidance for lab exertion in the college. There should be some lab programs in IITs OR NITS for the state universities students so that they can get proper experimental knowledge in deep.
It may be close during course or can be done in summer or winter vacation after the semester.
Allow to visit some of national research laboratory.
Characterization labs. E journal support.
In my college in ECE dep. Only one lab Assistant is there. So i complained to principle provide me lab assistant so that I can engage with my student nicely in the lab. But he rejects my proposal. So I have to do work of lab assistant also.
PCB cutting tool. HFSS software.

4. What is your next 3-year goal?
To create good labs necessary of U.G. course structure.
To create small projects for U.G. Students.
Provide best knowledge to the students.
New software and provide the software knowledge to students.
Conducting two workshops in institutes every year.
Two guest lecture from national or international in every year.
My next three year goal is to produce more skilled students so that they could create lab. I want to create centre of excellence in my college. meanwhile I want to continue my research interest in this 3 year period
I want to do PhD.
Engage the student in research area.
I want to deliver my lecture so that student can easily catch my lecture.
To increase the teaching level & improve communication & achieved the permanent job in college.
Get PhD.
To enhance my teaching skills so that I can perform my duty so will which can be helpful for the future of students.
I have completed my M. Tech in 2017 .So my aim will to enrolled in PhD. In coming years. Owing to my vast exposure as a teacher for engineering students, I can share my knowledge and experience in an innovation and inspirational way in order to make student personal development student.
To improve the quality of students of my institute and also to improve the quality of my teaching and research work through the utilization of better resources and techniques.
Will improve the quality of technical education my institute and be a good role model for my students.
Faith of students in terms of attending lecture.
Improve the ways of teaching.
Motivate the students for doing project based on society interest give direct research.
Going for PhD programme.
Want to work with 2nd & 3rd year student of my college so that they can get feel of engineering and they can apply their knowledge. Currently final year in about to pass out.

But I am also working (or Motivating ) them to achieve what they want.

( First thing is to make them motivated or bring them in clam like to design some small projects which we will lay down in campus)

Want to enhance my knowledge and find project or topic so that I can go for my PhD.

I would like to start a new department (chemical engineering) in my college since my college is on autonomous body. I would like the full support of TEQIP in my endeavor.

I would like to introduce new curriculum in applied chemistry dept.

To conduct workshop / expert lecture at the institutes.

To get enrolled in PhD programme or to be part of project based research.

To papers in respectable journals.

To become a good teacher.

Enroll for PhD in any IIT.

To improve the present situation with best of my efforts.

To get myself enrolled in PhD program in any of my interest areas heat transfer ,fluid mechanics  
renewable energy in IIT or IISC which will enable me to consider academics and research as a full 
time profession.

Research grant from TEQIP.

Research collaboration with IIT professors.

Teaching and Research.

To make the students understand the importance of chemistry in engineering domain chemistry.

To carry out small projects.

Quality improvement of education.

Set up of different labs.

Organize different technical competitions.

Set up different clubs.

Conduct GATE related tests.

The main objective in to improve the quality of students by conducting GATE test series at college 
level.

To make the students job oriented as well as research oriented.

Product development for local need.

Quality improvement of teaching.

Encourage students to think & relate theory practical or real world things.

Motivate students to think in practical direction.

I want to make my place leading in solar technology. This technology lead India on to a great 
heights and helpful for the college environment.

Teach in a very good manner.

Want to propose students to appear for GATE of the students I shall asked they are not interested in 
GATE.

Secondly we will try to teach term as per GATE syllabus.

Want to open research centre in institutes.

Also all TEQIP faculty wants to do PhD so that they may do well also.
- I want to design a stable system which will remain stable under all the problem facing new a days.
- For going PhD, improved teaching skill, more exposure to my field & to engage as permanent faculty.
- To get administrative position in a institutes by delivering my duties.
- Complete a project.
- Organise a conference.
- Research publications & motivate students for their course.
- To import the impotence of Physics in UG.
- To develop research lab at our institutes & publish our work in journal of international report.
- To successfully complete the PhD.
- Establish research labs.
- Publishing research papers.
- Guiding students for their projects and thesis.
- Writing books.
- Get involve in curriculum development.
- Formed group with B.Tech students to start research work.
- To organise workshop / conferences / short term course.
- To join a PhD program in some IIT under QIP.
- To enhance my technical knowledge as well as import in to the students.
- To evolve and enhance my skills as a successfully teacher.
- To carry my research a substantial level.
- To import quality education to the host institution.
- To become a good teacher.
- Completion of PhD by the end of year 2018.
- Get at least project & complete it.
- Get two publication year.