Summer Training Program on Active Learning for Senior Faculty
IIT Kanpur

Participating Institutes

- Government Engineering College Keonjhar
- Harcourt Butler Technical University Kanpur
- Bundelkhand Institute of Engineering and Technology, Jhansi
- Lok Nayak Jay Prakash Institute of Technology, Chapra, Bihār
- Darbhanga College of Engineering
- Gaya College of Engineering Gaya
- Institute of Engineering and Technology Bundelkhand
- Motihari College of Engineering Motihari
- Rajkiya Engineering College Banda
- Rajkiya Engineering College Bijnour
- RML Avadh University Faizabad
- Uttar Pradesh Textile Technology Institute Kanpur
- Dayalbagh Educational Institute Agra
- UNSIET, VBS Purvanchal University Jaunpur

Venue
PBCEC Building, IIT Kanpur

Organized By
Knowledge Incubation for TEQIP

Group A: May 21-25, 2018
Group B: June 02-06, 2018
Group C: June 11-15, 2018
Group D: July 02-06, 2018
Glimpse of the Event

Knowledge Incubation for TEQIP
Indian Institute of Technology Kanpur

Summer Training Program on Active Learning for Senior Faculty
21 - 25 May, 2018

Knowledge Incubation for TEQIP
Indian Institute of Technology Kanpur

Summer Training Program on Active Learning for Senior Faculty
2 - 6 June, 2018
Knowledge Incubation for TEQIP
Indian Institute of Technology Kanpur

Summer Training Program on Active Learning for Senior Faculty
11 - 15 June, 2018

Knowledge Incubation for TEQIP
Indian Institute of Technology Kanpur

Summer Training Program on Active Learning for Senior Faculty
2-6 July, 2018
About the Program

Phase three of TEQIP program emphasizes on improvement of teaching, learning and research competence, productivity of the faculty. Keeping this in mind, as directed by MHRD, NPIU planned a Faculty-Training program for the regular faculties (around 5000) of the TEQIP III institutes from focus states. These 5 days training workshops, held in batches of 100 aimed to orient participants on various modules of pedagogy, research and state-of-the-art learning facilities. The workshops were organized at ten IITs under Knowledge Incubation for TEQIP (Bombay, Delhi, Kanpur, Kharagpur, Guwahati, Roorkee, Hyderabad, Madras, Indore and Gandhinagar) during summer vacation. The participating faculties were from mixed cadre (Professor, Associate Professor & Assistant Professor) attended these programs at each IITs (from their respective quality circles).

Knowledge Incubation for TEQIP, IIT Kanpur organized four batches of Summer Training Program on Active
Learning for Senior Faculty at IIT Kanpur and hosted around 300 teachers from 15 engineering colleges from UP and Bihar. The participants from 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 program was designed to orient them on various generic aspects of teaching learning, instructional methodologies, and assessment and evaluation techniques used at IIT Kanpur. The curriculum consisted of four modules Pedagogy, Research, Academia-research collaborations and TEQIP III project. More than 100 IIT Kanpur faculty and staff from different departments came together to make this initiative a big success.
The program focused on following topics:

- Peer learning
- Outcome Based Education
- Autonomy
- Good Governance
- State-of-the-art Laboratory visits
- How to get research proposals and funding
- Academic Ecosystem
- Co-curricular activities & extracurricular activities
- Student Placement
- Innovation and Incubation
- Industry-Academia Collaborations
The 5-day event was organized in 4 batches. Day 1 started with lectures on curriculum constituents, academic structure of IIT Kanpur, how to evaluate lectures and course monitoring, MOOCs, flipped 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. Participating colleges were requested to bring presentation about their institutes explaining about their

- General Curriculum
- Exam System
- Evaluation system

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 three lectures on departmental core teaching strategies we organized. Familiarizing participants to how different department at IIT Kanpur functions.
Participating teachers were requested to bring presentations on their
- Curriculum
- Examination system
- Students Projects
- Research direction
- Faculty profile

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 on TEQIP that explained about TEQIP III reforms.
# Participation Summary

## May 21-25, 2018

<table>
<thead>
<tr>
<th>S. No</th>
<th>Institute Name</th>
<th>Registered Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dayalbagh Educational Institute (Deemed University) Dayalbagh, Agra</td>
<td>23</td>
</tr>
<tr>
<td>2</td>
<td>FET MJP Rohilakhand University, Bareilly</td>
<td>55</td>
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<tr>
<td>3</td>
<td>Uma Nath Singh Institute of Engineering &amp; Technology, VBS Purvanchal University, Jaunpur</td>
<td>13</td>
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<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>91</strong></td>
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</tbody>
</table>

## June 02-06, 2018

<table>
<thead>
<tr>
<th>S. No</th>
<th>Institute Name</th>
<th>Registered Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Darbhanga College of Engineering, Darbhanga</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>Gaya College of Engineering, Gaya, Sri Krishna Nagar</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>Lok Nayak Jay Prakash Institute of Technology, Chapra, Bihar</td>
<td>43</td>
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<tr>
<td>4</td>
<td>Motihari College of Engineering, Motihari</td>
<td>19</td>
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<tr>
<td>5</td>
<td>Institute of Engineering &amp; Technology, Bundelkhand University, Kanpur Road, Jhansi</td>
<td>11</td>
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<td></td>
<td><strong>Total</strong></td>
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### June 11-15, 2018

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<th>S. No</th>
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<th>Registered Participants</th>
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<tbody>
<tr>
<td>1</td>
<td>Government Engineering College, Keonjhar</td>
<td>17</td>
</tr>
<tr>
<td>2</td>
<td>Bundelkhand Institute of Engineering &amp; Technology, Jhansi</td>
<td>37</td>
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<tr>
<td>3</td>
<td>Harcourt Butler Technical University (Formerly HBTI), Kanpur</td>
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<td><strong>Total</strong></td>
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### July 02-06, 2018

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<td>Gaya College of Engineering, Gaya, Sri Krishna Nagar</td>
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<tr>
<td>2</td>
<td>Institute of Engineering &amp; Technology, Dr. RML Awadh University, Faizabad</td>
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<tr>
<td>3</td>
<td>Rajkiya Engineering College Bijnor Jalilpur Block Road, Near Eidgah, Chandpur, District Bijnor</td>
<td>24</td>
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<tr>
<td>4</td>
<td>Rajkiya Engineering College, Banda</td>
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<tr>
<td>5</td>
<td>Uttar Pradesh Textile Technology Institute, Kanpur</td>
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<td></td>
<td><strong>Total</strong></td>
<td><strong>103</strong></td>
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</tbody>
</table>
## PARTICIPATING INSTITUTES

<table>
<thead>
<tr>
<th>S. No</th>
<th>Institutes</th>
<th>Number of Participants</th>
</tr>
</thead>
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<td>Darbhanga College of Engineering, Darbhanga</td>
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<td>18</td>
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<td>6.</td>
<td>Lok Nayak Jay Prakash Institute of Technology, Chapra, Bihar</td>
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<td>7.</td>
<td>Motihari College of Engineering, Motihari</td>
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<td>8.</td>
<td>Institute of Engineering &amp; Technology, Bundelkhand University, Kanpur Road, Jhansi-</td>
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<td>9.</td>
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<td>15.</td>
<td>Uttar Pradesh Textile Technology Institute, Kanpur</td>
<td>16</td>
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**Total**: 391
State-wise Participation Summary

<table>
<thead>
<tr>
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<tr>
<td>1. Bihar</td>
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<td>3. Odisha</td>
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<td>4. Uttar Pradesh</td>
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<td><strong>Total</strong></td>
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<td>List of Speakers</td>
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</tr>
<tr>
<td>1</td>
<td>Prof. A. R Harish</td>
</tr>
<tr>
<td>2</td>
<td>Prof. Akash Anand</td>
</tr>
<tr>
<td>3</td>
<td>Prof. Abhas Singh</td>
</tr>
<tr>
<td>4</td>
<td>Prof. Adrish Bannerjee</td>
</tr>
<tr>
<td>5</td>
<td>Prof. Aloke Dutta</td>
</tr>
<tr>
<td>6</td>
<td>Prof. Amey Karkare</td>
</tr>
<tr>
<td>7</td>
<td>Prof. Animesh Das</td>
</tr>
<tr>
<td>8</td>
<td>Prof. Anindya Chatterjee</td>
</tr>
<tr>
<td>9</td>
<td>Prof. Anurag Gupta</td>
</tr>
<tr>
<td>10</td>
<td>Prof. Arnab Bhattacharya</td>
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<tr>
<td>11</td>
<td>Prof. Ashish Garg</td>
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<td>12</td>
<td>Prof. Avinash Joshi</td>
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<tr>
<td>13</td>
<td>Prof. B. Mazhari</td>
</tr>
<tr>
<td>14</td>
<td>Prof. B. Panda</td>
</tr>
<tr>
<td>15</td>
<td>Prof. Bhaskar Dasgupta</td>
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<tr>
<td>16</td>
<td>Prof. C S Upadhyay</td>
</tr>
<tr>
<td>17</td>
<td>Prof. D. Goswami</td>
</tr>
<tr>
<td>18</td>
<td>Prof. D.L.V.K Prasad</td>
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<td>19</td>
<td>Prof. Debadatta Mishra</td>
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<tr>
<td>20</td>
<td>Prof. Deepak Gupta</td>
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<tr>
<td>21</td>
<td>Prof. Dheeraj Sanghi</td>
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<tr>
<td>22</td>
<td>Prof. Durgesh C. Rai</td>
</tr>
<tr>
<td>23</td>
<td>Prof. G. Anantharaman</td>
</tr>
<tr>
<td>24</td>
<td>Prof. Ishan Sharma</td>
</tr>
<tr>
<td>25</td>
<td>Prof. J. K. Bera</td>
</tr>
<tr>
<td>26</td>
<td>Prof. Kamal Poddar</td>
</tr>
<tr>
<td>27</td>
<td>Prof. K S Venkatesh</td>
</tr>
<tr>
<td>28</td>
<td>Prof. K. Muralidhar</td>
</tr>
<tr>
<td>29</td>
<td>Prof. M L N Rao</td>
</tr>
<tr>
<td>30</td>
<td>Prof. M.K Harbola</td>
</tr>
<tr>
<td>31</td>
<td>Prof. M.L.N Rao</td>
</tr>
<tr>
<td>32</td>
<td>Prof. Malay K Das</td>
</tr>
<tr>
<td>Time</td>
<td>Event</td>
</tr>
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<td>---------------------</td>
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</tr>
<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 – 11:30 AM    | Presentation on Academic Structure at IITK                          
                       | *Prof. C. S Upadhyay*                                                |
| 11:30 – 12:30 PM    | Course monitoring mechanism at IITK                                  
                       | *Prof. Manoj K. Harbola*                                             |
| 12:30 – 1:00 PM     | MOOCS, Flipped Classroom paradigms                                   
                       | *Prof. T.V Prabhakar*                                                |
| 1:00 – 1:30 PM      | Teaching with MOOCS                                                  
                       | *Prof. D. Gupta*                                                    |
| 1:30 – 2:30 PM      | **Lunch Break**                                                      |
| 2:30 – 3:00 PM      | How to prepare for a course?                                         
                       | *Prof. P Shunmugaraj*                                               |
| 3:00 – 3:15 PM      | **Tea Break**                                                        |
| 3:15 – 6:30 PM      | Session on Experimentation                                            
                       | NWTF Lab                                                            
<pre><code>                   | *Prof. Kamal Poddar*                                                |
</code></pre>
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 – 11:00 AM</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 – 12:30 PM</td>
<td>Tea Break</td>
</tr>
<tr>
<td>12:30 – 1:00 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>1:00 – 2:30 PM</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>2:30 – 3:30 PM</td>
<td>Material Science in UG education</td>
</tr>
<tr>
<td></td>
<td><em>Prof. Shashank Shekhar</em></td>
</tr>
<tr>
<td>3:30 PM Onwards</td>
<td>30 Minutes Presentation of participating colleges on their:</td>
</tr>
<tr>
<td></td>
<td>• General Curriculum</td>
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<td></td>
<td>• Exam System</td>
</tr>
<tr>
<td></td>
<td>• Evaluation system</td>
</tr>
<tr>
<td></td>
<td>• Dayalbagh Educational Institute: Prof. V Soami Das</td>
</tr>
<tr>
<td></td>
<td>• Uma Nath Singh Institute of Engineering and Technology, VBS Purvanchal University, Jaunpur: Jaya Shukla</td>
</tr>
<tr>
<td></td>
<td>Observers: <em>Prof. C. S Upadhyay &amp; Prof. Ishan Sharma</em></td>
</tr>
<tr>
<td>Time</td>
<td>Event</td>
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<td>--------------</td>
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</tbody>
</table>
| 9:00 – 10:30 AM | 30 Minutes Presentation from participating colleges about their department:  
  - Curriculum  
  - Examination system  
  - Students Projects  
  - Research direction  
  - Faculty profile  
  - EE: G.S Sailesh (Dayalbagh Educational Institute), Jaya Shukla (Uma Nath Singh Institute of Engineering and Technology, VBS Purvanchal University, Jaunpur)  
  - ME: Prof. Sanjay Srivastava (Dayalbagh Educational Institute)  
  - CSE: Dileep Kumar Yadav (Uma Nath Singh Institute of Engineering and Technology, VBS Purvanchal University, Jaunpur) |
| 10:30 – 11:00 AM | Tea                                                                   |
| 11:00 – 12:30 PM | IIT Kanpur departmental presentation on:  
  - Curriculum  
  - Research Direction  
  - Possible areas of collaboration in teaching, research & curriculum development |
| 1:00 – 2:00 PM | Lunch                                                                 |
| 2:00 – 6:00 PM | Visit to UG & PG Labs                                                |
| 6:00 – 6:30 PM | IIT Kanpur infrastructure  
  *Mr. Rajeev Garg* |
<p>| 8:00 PM       | Special Dinner                                                       |</p>
<table>
<thead>
<tr>
<th>Time</th>
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</tr>
</thead>
<tbody>
<tr>
<td>9:30 – 1:00 PM</td>
<td>Lab Visits</td>
</tr>
<tr>
<td></td>
<td>• 9:15-10:30 Physics Core Prof. Rajeev Gupta</td>
</tr>
<tr>
<td></td>
<td>• 10:30-11:30 Chemistry Lab Prof. M L N Rao</td>
</tr>
<tr>
<td></td>
<td>• 11:30-1:00 Tinkering lab</td>
</tr>
<tr>
<td>1:00 – 2:00 PM</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>2:00 – 2:30 PM</td>
<td>Presentation on computing lab</td>
</tr>
<tr>
<td></td>
<td><em>Prof. Amey Karkare</em></td>
</tr>
<tr>
<td>2:30 – 3:30 PM</td>
<td>Discussion on UG research/BTP and engaging the UG students</td>
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<tr>
<td></td>
<td><em>Prof. C.S Upadhyay, Prof. M.K Harbola</em></td>
</tr>
<tr>
<td>3:30 – 4:00 PM</td>
<td>Tea Break</td>
</tr>
<tr>
<td>4:00 – 5:00 PM</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>5:00 PM Onwards</td>
<td>Session with Participants from Uma Nath Singh Institute of Engineering &amp; Technology, VBS Purvanchal University, Jaunpur</td>
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<tr>
<td></td>
<td><em>Prof. C.S Upadhyay</em></td>
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**Day-4, May 24, Thursday**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>9:00 – 10:00 AM</td>
<td>Innovation &amp; Incubation with UGs</td>
</tr>
<tr>
<td></td>
<td>• Collaboration</td>
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<tr>
<td></td>
<td>• Hand Holding</td>
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<td></td>
<td>• Support for satellite centers at TEQIP colleges</td>
</tr>
<tr>
<td></td>
<td><em>Mr. Rajarshi Mukhopadhyay (COO, FIRST)</em></td>
</tr>
<tr>
<td>10:00-11:00</td>
<td>Core mathematics- objectives, content, preparation, delivery, expectation</td>
</tr>
<tr>
<td></td>
<td><em>Prof. T Muthukumar</em></td>
</tr>
<tr>
<td>11:00 – 11:30 PM</td>
<td>Tea Break</td>
</tr>
<tr>
<td>11:30 – 1:00 PM</td>
<td>Session on TEQIP: Expectations, Facilities &amp; Enablers</td>
</tr>
<tr>
<td></td>
<td><em>Prof. C. S Upadhyay</em></td>
</tr>
<tr>
<td>1:00 – 2:00 PM</td>
<td>Lunch Break</td>
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<tr>
<td>2:00 PM</td>
<td>Closure</td>
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**Day-5, May 25, Friday**
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:30 – 9:00 AM</td>
<td>Registration</td>
</tr>
<tr>
<td>9:00 – 9:30 AM</td>
<td>Welcome Talk - Generic curriculum and its constituents, Academic</td>
</tr>
<tr>
<td></td>
<td>structure of IIT Kanpur</td>
</tr>
<tr>
<td></td>
<td><strong>Prof. C. S Upadhyay</strong></td>
</tr>
<tr>
<td>9:30 – 10:00 AM</td>
<td><strong>High Tea</strong></td>
</tr>
<tr>
<td>10:00 – 10:30 AM</td>
<td>Presentation on Academic Structure at IIT Kanpur</td>
</tr>
<tr>
<td></td>
<td><strong>Prof. C. S Upadhyay</strong></td>
</tr>
<tr>
<td>10:30 – 11:30 AM</td>
<td>MOOCS, Flipped Classroom paradigms</td>
</tr>
<tr>
<td></td>
<td><strong>Prof. T.V Prabhakar</strong></td>
</tr>
<tr>
<td>11:30 – 1:30 PM</td>
<td>What to test for? Learning evaluation through quizzes, exams, projects</td>
</tr>
<tr>
<td></td>
<td><strong>Prof. Manoj K. Harbola</strong></td>
</tr>
<tr>
<td>1:00 – 2:00 PM</td>
<td><strong>Lunch Break</strong></td>
</tr>
<tr>
<td>2:00 – 2:30 PM</td>
<td>Course monitoring mechanism at IIT Kanpur</td>
</tr>
<tr>
<td></td>
<td><strong>Prof. C.S Upadhyay</strong></td>
</tr>
<tr>
<td>2:30 – 3:00 PM</td>
<td>How to prepare for a course?</td>
</tr>
<tr>
<td></td>
<td>Prof. P Shunmugaraj</td>
</tr>
<tr>
<td>3:00 – 3:30 PM</td>
<td><strong>Tea Break</strong></td>
</tr>
<tr>
<td>3:30 – 6:30 PM</td>
<td>Session on Experimentation - I</td>
</tr>
<tr>
<td></td>
<td>NWTF Lab</td>
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<tr>
<td></td>
<td><strong>Prof. Kamal Poddar</strong></td>
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</tbody>
</table>
### Day-2, June 03, Sunday

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>9:30 – 10:30 AM</td>
<td>Core mathematics – objectives, content, preparation, delivery, expectation  &lt;br&gt; <em>Prof. Akash Anand</em></td>
</tr>
<tr>
<td>10:30 – 11:00 AM</td>
<td>Tea Break</td>
</tr>
<tr>
<td>11:00 – 12:30 PM</td>
<td>Core Physics - objectives, content, preparation, delivery, expectation  &lt;br&gt; <em>Prof. Manoj K. Harbola</em></td>
</tr>
<tr>
<td>1:00 – 2:00 PM</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>2:30 – 3:30 PM</td>
<td>Presentation on computing lab  &lt;br&gt; <em>Prof. Amey Karkare</em></td>
</tr>
<tr>
<td>3:30 – 4:30 PM</td>
<td>30 Minutes Presentation of participating colleges on their:  &lt;br&gt; - General Curriculum  &lt;br&gt; - Exam System  &lt;br&gt; - Evaluation system  &lt;br&gt; <em>Observers: Prof. C. S Upadhyay &amp; Prof. Pankaj Wahi</em></td>
</tr>
<tr>
<td>Time</td>
<td>Event</td>
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</tr>
<tr>
<td>9:00 – 10:30 AM</td>
<td>30 Minutes Presentation from participating colleges about their department:</td>
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<tr>
<td></td>
<td>• Curriculum</td>
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<td>• Examination system</td>
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<td></td>
<td>• Research direction</td>
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<td>• Faculty profile</td>
</tr>
<tr>
<td>10:30 – 11:00 AM</td>
<td>Tea</td>
</tr>
<tr>
<td>11:00 – 12:30 PM</td>
<td>IIT Kanpur departmental presentation on:</td>
</tr>
<tr>
<td></td>
<td>• Curriculum</td>
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<td></td>
<td>• Research Direction</td>
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<tr>
<td></td>
<td>• Possible areas of collaboration in teaching, research &amp; curriculum development</td>
</tr>
<tr>
<td>1:00 – 2:00 PM</td>
<td>Lunch</td>
</tr>
<tr>
<td>2:00 – 6:00 PM</td>
<td>Visit to UG &amp; PG Labs</td>
</tr>
<tr>
<td>8:00 PM</td>
<td>Special Dinner</td>
</tr>
<tr>
<td>Time</td>
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</tr>
<tr>
<td>9:30 – 12:30 AM</td>
<td>Lab Visits</td>
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<tr>
<td></td>
<td>- 9:15-10:30 Physics Core Prof. Rajeev Gupta</td>
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<td></td>
<td>- 10:30-11:30 Chemistry Lab Prof. M L N Rao</td>
</tr>
<tr>
<td></td>
<td>- 11:30-12:30 Tinkering lab, 4i Lab</td>
</tr>
<tr>
<td>12:30 – 1:30 PM</td>
<td><strong>Lunch Break</strong></td>
</tr>
<tr>
<td>1:30 – 2:30 PM</td>
<td>Material Science in UG education</td>
</tr>
<tr>
<td></td>
<td><em>Prof. Ashish Garg</em></td>
</tr>
<tr>
<td>2:30 – 3:30 PM</td>
<td>Discussion on UG research/BTP and engaging the UG students</td>
</tr>
<tr>
<td></td>
<td><em>Prof. Ishan Sharma/ Prof. M.K Harbola/ Prof. C.S Upadhyay</em></td>
</tr>
<tr>
<td>3:30 – 4:00 PM</td>
<td><strong>Tea Break</strong></td>
</tr>
<tr>
<td>4:00 – 5:00 PM</td>
<td>Talk on Infrastructure of IIT Kanpur and how to maintain it</td>
</tr>
<tr>
<td></td>
<td><em>Mr. M K Verma, IWD</em></td>
</tr>
<tr>
<td>5:00 – 5:30 PM</td>
<td>Experiments in teaching with available Electronic Resources</td>
</tr>
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<td></td>
<td><em>Prof. Deepak Gupta</em></td>
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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>9:00 – 10:00 AM</td>
<td>Innovation &amp; Incubation with UGs</td>
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<tr>
<td></td>
<td>- Collaboration</td>
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<tr>
<td></td>
<td>- Hand Holding</td>
</tr>
<tr>
<td></td>
<td>- Support for satellite centers at TEQIP colleges</td>
</tr>
<tr>
<td></td>
<td><em>Mr. Rajarshi Mukhopadhyay (COO, FIRST)</em></td>
</tr>
<tr>
<td>10:00 -1:00 PM</td>
<td><strong>Session on Experimentation - II</strong></td>
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<tr>
<td></td>
<td>NWTF Lab</td>
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<tr>
<td></td>
<td><em>Prof. Kamal Poddar</em></td>
</tr>
<tr>
<td>1:00 – 2:00 PM</td>
<td>Session on TEQIP: Expectations, Facilities &amp; Enablers</td>
</tr>
<tr>
<td></td>
<td><em>Prof. C. S Upadhyay</em></td>
</tr>
<tr>
<td>2:00 PM</td>
<td><strong>Lunch &amp; Closure</strong></td>
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</table>
## Group C: June 11-15, 2018

### Day-1, June 11, Monday

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>8:30 – 9:00 AM</td>
<td>Registration</td>
</tr>
<tr>
<td>9:00 – 9:30 AM</td>
<td>Welcome Talk&lt;br&gt;<strong>Prof. Ishan Sharma</strong></td>
</tr>
<tr>
<td>9:30 – 10:15 AM</td>
<td><strong>High Tea</strong></td>
</tr>
<tr>
<td>10:15 – 11:00 AM</td>
<td>What to test for? Learning evaluation through quizzes, exams, projects&lt;br&gt;<strong>Prof. Anindya Chaterjee</strong></td>
</tr>
<tr>
<td>11:00 – 12:00 PM</td>
<td>MOOCS, Flipped Classroom paradigms&lt;br&gt;<strong>Mrs. Revathy K T</strong></td>
</tr>
<tr>
<td>12:00 – 1:00 PM</td>
<td>My experiments with teaching: Themes and tricks&lt;br&gt;<strong>Prof. Bhaskar Dasgupta</strong></td>
</tr>
<tr>
<td>1:00 – 2:00 PM</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>2:00 – 3:00 PM</td>
<td>Course monitoring mechanism &amp; student feedback&lt;br&gt;<strong>Prof. Pankaj Wahi</strong></td>
</tr>
<tr>
<td>3:00 – 4:00 PM</td>
<td>Academic structure at IIT Kanpur + Academic Administration&lt;br&gt;<strong>Prof. Neeraj Mishra</strong></td>
</tr>
<tr>
<td>4:00 – 4:30 PM</td>
<td>Tea Break</td>
</tr>
<tr>
<td>4:30 – 6:30 PM</td>
<td>Session on Experimentation - I&lt;br&gt;NWTF Lab&lt;br&gt;<strong>Prof. Kamal Poddar</strong></td>
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# Day-2, June 12, Tuesday

<table>
<thead>
<tr>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>9:30 – 11:00 AM</td>
<td><strong>Core Physics</strong> – objectives, content, preparation, delivery, expectation  &lt;br&gt; <em>Prof. Sagar Chakraborty</em></td>
</tr>
<tr>
<td>11:00 – 11:30 AM</td>
<td>Tea Break</td>
</tr>
<tr>
<td>11:30 – 12:30 PM</td>
<td><strong>Core Mathematics</strong> - objectives, content, preparation, delivery, expectation  &lt;br&gt; <em>Prof. Akash Anand</em></td>
</tr>
<tr>
<td>12:30 – 1:00 PM</td>
<td><strong>Introduction to TEQIP III</strong>  &lt;br&gt; <em>Prof. Ishan Sharma</em></td>
</tr>
<tr>
<td>1:00 – 2:30 PM</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>2:30 – 3:30 PM</td>
<td><strong>Material Science in UG education</strong>  &lt;br&gt; <em>Prof. Ashish Garg</em></td>
</tr>
<tr>
<td>3:30 PM Onwards</td>
<td>30 Minutes Presentation of participating colleges on their:</td>
</tr>
<tr>
<td></td>
<td>- General Curriculum</td>
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<td></td>
<td>- Exam System</td>
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<tr>
<td></td>
<td>- Evaluation system</td>
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<td></td>
<td>- <strong>BIET Jhansi:</strong> Dr. Abhay Kumar Verma</td>
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<tr>
<td></td>
<td>- <strong>GEC Keonjhar:</strong> Er. Mukesh Bathre</td>
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<td></td>
<td>- <strong>HBTU Kanpur:</strong> Dr. Dipteek Parmar</td>
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<tr>
<td></td>
<td><strong>Observer:</strong> <em>Prof. Ishan Sharma &amp; Prof. Pankaj Wahi</em></td>
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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>9:00 – 10:30 AM</td>
<td>30 Minutes Presentation from participating colleges about their</td>
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<td>department:</td>
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<tr>
<td></td>
<td>• Curriculum</td>
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<td></td>
<td>• Examination system</td>
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<td>• Students Projects</td>
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<td></td>
<td>• Research direction</td>
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<td></td>
<td>• Faculty profile</td>
</tr>
<tr>
<td>10:30 – 11:00 AM</td>
<td>Tea</td>
</tr>
<tr>
<td>11:00 – 12:30 PM</td>
<td>IIT Kanpur departmental presentation on:</td>
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<tr>
<td></td>
<td>• Curriculum</td>
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<td></td>
<td>• Research Direction</td>
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<td></td>
<td>• Possible areas of collaboration in teaching, research &amp;</td>
</tr>
<tr>
<td></td>
<td>curriculum development</td>
</tr>
<tr>
<td>1:00 – 2:00 PM</td>
<td>Lunch</td>
</tr>
<tr>
<td>2:00 – 6:00 PM</td>
<td>Visit to UG &amp; PG Labs</td>
</tr>
<tr>
<td>8:00 PM</td>
<td>Special Dinner</td>
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</table>
# Day-4, June 14, Thursday

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td><strong>9:15 – 1:00 PM</strong></td>
<td><strong>Lab Visits</strong></td>
</tr>
<tr>
<td></td>
<td>• 9:15-10:30 Physics Core Prof. Rajeev Gupta</td>
</tr>
<tr>
<td></td>
<td>• 10:30-11:30 Chemistry Lab Prof. M L N Rao</td>
</tr>
<tr>
<td></td>
<td>• 11:30-12:30 Tinkering lab, 4i Lab</td>
</tr>
<tr>
<td><strong>1:00 – 2:00 PM</strong></td>
<td><strong>Lunch Break</strong></td>
</tr>
<tr>
<td><strong>2:00 – 2:30 PM</strong></td>
<td><strong>Presentation on computing Lab</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Prof. Amey karkare</strong></td>
</tr>
<tr>
<td><strong>2:30 – 3:30 PM</strong></td>
<td><strong>Discussion on UG research/BTP and engaging the UG students</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Prof. Ishan Sharma/ Prof. Pankaj Wahi/ Prof. Mangal Kothari/ Prof. Ashish Garg</strong></td>
</tr>
<tr>
<td><strong>3:30 – 4:00 PM</strong></td>
<td><strong>Tea Break</strong></td>
</tr>
<tr>
<td><strong>4:00 – 5:00 PM</strong></td>
<td><strong>How to place your students</strong></td>
</tr>
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<td></td>
<td><strong>Prof. J Ramkumar</strong></td>
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# Day-5, June 15, Friday

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td><strong>9:00 – 10:00 AM</strong></td>
<td><strong>Session on Experimentation -II (BIET Jhansi, GEC, Keonjhar)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Prof. Kamal Poddar</strong></td>
</tr>
<tr>
<td><strong>10:00 -1:00 PM</strong></td>
<td><strong>Innovation &amp; Incubation with UGs</strong></td>
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<td></td>
<td>• Collaboration</td>
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<td>• Hand Holding</td>
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<td></td>
<td>• Support for satellite centers at TEQIP colleges</td>
</tr>
<tr>
<td></td>
<td><strong>Dr. Tejas S Kusurkar, SIIC IITK</strong></td>
</tr>
<tr>
<td><strong>1:00 – 2:00 PM</strong></td>
<td><strong>Closure &amp; Session on TEQIP: Expectations, Facilities &amp; Enablers</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Prof. Ishan Sharma</strong></td>
</tr>
<tr>
<td><strong>2:00 PM</strong></td>
<td><strong>Lunch</strong></td>
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<tr>
<td>Time</td>
<td>Event</td>
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<tr>
<td>8:30 – 9:00 AM</td>
<td>Registration</td>
</tr>
<tr>
<td>9:00 – 10:00 AM</td>
<td>Welcome Talk - Generic curriculum and its constituents</td>
</tr>
<tr>
<td>10:00 – 10:30 AM</td>
<td>High Tea</td>
</tr>
<tr>
<td>10:30 – 11:30 AM</td>
<td>What to test for? Learning evaluation through quizzes, exams, projects</td>
</tr>
<tr>
<td>11:30 – 12:30 PM</td>
<td>MOOCS, Flipped Classroom paradigms</td>
</tr>
<tr>
<td>2:00 – 3:00 PM</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>3:00 – 4:00 PM</td>
<td>Academic structure at IIT Kanpur + Academic Administration</td>
</tr>
<tr>
<td>4:00 – 4:30 PM</td>
<td>Tea Break</td>
</tr>
<tr>
<td>4:30 – 6:30 PM</td>
<td>Session on Experimentation-I (Emphasis on set-ups, design of experiments &amp; Instrumentation, Virtual Instrumentation lab, NWTF) (UPTTI Kanpur, GCE Gaya, IET Faizabad)</td>
</tr>
</tbody>
</table>

*Prof. C S Upadhyay*  
*Prof. Neeta Singh*  
*Prof. Neeraj Mishra*  
*Prof. Kamal Poddar*
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>9:30 – 10:30 AM</td>
<td>Introduction to KIT at IIT Kanpur</td>
</tr>
<tr>
<td></td>
<td><em>Shiroddy Anand</em></td>
</tr>
<tr>
<td>10:30 – 11:30 AM</td>
<td>Tea Break</td>
</tr>
<tr>
<td>11:30 – 12:30 PM</td>
<td>Core Mathematics - objectives, content, preparation, delivery,</td>
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<td></td>
<td>expectation</td>
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<tr>
<td></td>
<td><em>Prof. Akash Anand</em></td>
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<tr>
<td>12:30 – 1:00 PM</td>
<td>Discussion on Communication Skills</td>
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<tr>
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<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 – 3:30 PM</td>
<td>Material Science in UG education</td>
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<td><em>Prof. Ashish Garg</em></td>
</tr>
<tr>
<td>3:30 PM Onwards</td>
<td>30 Minutes Presentation of participating colleges on their:</td>
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<td>• General Curriculum</td>
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<td></td>
<td>• Evaluation system</td>
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<td>• Research Initiatives</td>
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<td>• Placement Management</td>
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<td></td>
<td>• Innovation and Incubation</td>
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<td><em>Observers: Prof. C S Upadhyay/Prof. Ashish Garg</em></td>
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### Day-3, July 04, Wednesday

<table>
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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>9:00 – 10:30 AM</td>
<td><strong>30 Minutes Presentation from participating colleges about their department:</strong></td>
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<td></td>
<td>- Curriculum</td>
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<td>- Examination system</td>
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<td>- Students Projects</td>
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<td></td>
<td>- Research direction</td>
</tr>
<tr>
<td></td>
<td>- Faculty profile</td>
</tr>
<tr>
<td>10:30 – 11:00 AM</td>
<td><strong>Tea</strong></td>
</tr>
<tr>
<td>11:00 – 12:30 PM</td>
<td>IIT Kanpur departmental presentation on:</td>
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<td></td>
<td>- Curriculum</td>
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<td></td>
<td>- Research Direction</td>
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<td></td>
<td>- Possible areas of collaboration in teaching, research &amp; curriculum development</td>
</tr>
<tr>
<td>1:00 – 2:00 PM</td>
<td><strong>Lunch</strong></td>
</tr>
<tr>
<td>2:00 – 6:00 PM</td>
<td>Visit to UG &amp; PG Labs</td>
</tr>
<tr>
<td>8:00 PM</td>
<td><strong>Special Dinner</strong></td>
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### Day-4, July 05, Thursday

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>9:15 – 1:00 PM</td>
<td><strong>Lab Visits</strong></td>
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<td></td>
<td>- <strong>9:15-10:30</strong> Physics Core Prof. Rajeev Gupta</td>
</tr>
<tr>
<td></td>
<td>- <strong>10:30-11:30</strong> Chemistry Lab Prof. M L N Rao</td>
</tr>
<tr>
<td></td>
<td>- <strong>11:30-12:30</strong> Tinkering lab, 4i Lab</td>
</tr>
<tr>
<td>1:00 – 2:00 PM</td>
<td><strong>Lunch Break</strong></td>
</tr>
<tr>
<td>2:00 – 2:30 PM</td>
<td><strong>Incubation &amp; Innovation with UGs</strong></td>
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<td></td>
<td>- Collaboration</td>
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<td>- Hand Holding</td>
</tr>
<tr>
<td></td>
<td>- Support for satellite centres at TEQIP colleges</td>
</tr>
<tr>
<td></td>
<td><em>Dr. Tejas Kusurkar, SIIC IIT Kanpur</em></td>
</tr>
<tr>
<td>2:30 – 3:30 PM</td>
<td><strong>Discussion on UG research/BTP and engaging the UG students</strong></td>
</tr>
<tr>
<td></td>
<td><em>Prof. Prof C S Upadhyay/ Prof. Mangalgiri/ Prof. Ashish Garg/Prof. GM Kamath</em></td>
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</tbody>
</table>
### Day-5, July, Friday

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>9:00 – 11:30 AM</td>
<td><strong>Session on Experimentation -II</strong> (Rajkiya Institute of Technology Banda &amp; Rajkiya Institute of Technology Bijnor)</td>
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<tr>
<td></td>
<td><em>Prof. Kamal Poddar</em></td>
</tr>
<tr>
<td>12:00 -1:00 PM</td>
<td><strong>Industry Academic Interaction (Followed by discussion)</strong></td>
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<td></td>
<td><em>Prof. Mangalgiri</em></td>
</tr>
<tr>
<td>1:00 – 2:00 PM</td>
<td><strong>Session on TEQIP: Expectations, Facilities &amp; Enablers &amp; Closure</strong></td>
</tr>
<tr>
<td></td>
<td><em>Prof. C S Upadhyay</em></td>
</tr>
<tr>
<td>2:00 PM</td>
<td><strong>Lunch</strong></td>
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</table>
Summer Training Program on Active Learning aimed at rejuvenating teaching, learning and research skills of senior faculties of various participating colleges and motivating them to become instruments of change at their institutes. This was an excellent approach to familiarize participants to generic aspects of teaching-learning, instructional methodologies, assessment and evaluation techniques used at IIT Kanpur and optimize their teaching.

- **Academic Ecosystem**: Participants were encouraged to create such academic atmosphere at their institute so that they can attract best minds in the country. Need of **dynamics and creative environment** at an institute was emphasized.
  - Encourage **teamwork** to pave a smooth way for institute progress.
  - Give teachers required support so that they can expand intellectual horizon of their students.

- **Teaching**: How to identify student needs and weaknesses. Emphasis on understanding role of a given course in overall learning process and learning objectives - *Do not cover but uncover*. Emphasis on encouraging students to participate in co-curricular activities & extracurricular activities

- They were encouraged **to incorporate latest technology** in their teaching: Flipped classroom, Massive Open Online Courses (MOOCs), use of resources – Library, E- Content (NPTEL COURSES, SWAYAM, MOOCS)

- **Innovation and Incubation**: Teachers were encouraged to be receptive to student’s ideas and motivate students to bring out their innovative side. Participants were introduced to ideas on how to initiate innovation and incubation centers at their institutes.

- Discussions on how to initiate **industry-academia interaction** introduced participants to various opportunities in this area (industry projects, industry-sponsored research, consultancy and R&D)
  - How to employ their scientific knowledge, research and know-how to solve industry problems and understand their expectations.
Creation of such a synergy of industry and academia so that they can work together for the betterment of the society.

- Importance of student placement was emphasized. How to place student; How to prepare students for placements; How student placement help create links between institutes and industry.

- How to build an institution, importance of autonomy, experience sharing on autonomy, good governance, and related good teaching practices were shared with the participants.

- State-of-the-art laboratory visits were arranged to encourage participants to plan lab lectures to explain concepts; How to prepare hands-on experiments connected with theory learnt and how to encourage design of experiments by students.

- Discussion on B.Tech. project gave participants ideas on how to engage students in various projects.
  - Importance of clarity about what the UG student should be doing.
  - How to give practical feel to students on how the subjects they learn can be applied to various problems.

- Participants were introduced to various aspects of TEQIP III:
  - Introduction to TEQIP, vision, and mission
  - Project expectations
  - Progress of TEQIP II
  - KIT Activities for TEQIP Colleges
SUMMARY of FEEDBACK

GROUP A
May 21-25, 2018

Workshop

1. Clarity of communication about workshop

2. Organization of the sessions
3. **Quality of Lectures**

- Excellent: 73%
- Good: 24%
- Ordinary: 3%

4. **Effectiveness of discussions**

- Excellent: 60%
- Good: 33%
- Ordinary: 7%
5. **Effectiveness of learning experience**

![Pie chart showing effectiveness of learning experience]

- Excellent: 62%
- Good: 35%
- Ordinary: 3%

6. **Workshop duration**

![Pie chart showing workshop duration]

- Appropriate: 100%
- Short: 0%
- Long: 0%
7. Would you like to have more such sessions?

8. Would you like e-lectures by experts on special topics?
9. Suggest Specific topic that you would like additional expert lectures on

- 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
- Non convention machining.
- Soft skills (for final year students)
- Placement training program

10. Additional Suggestions

- Software of students and our interest.
- Workshops should be arranged ongoing 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. Please 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 be given more time for department wise
Teaching

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

2. Do you give class projects for UG classes?
3. Do you give class projects for PG classes?

- Yes: 71%
- No: 29%

4. Do you have sufficient resources for laboratory courses?

- Yes: 66%
- No: 34%
5. Is the library/journal/e-connection support adequate?

6. Would you like to have common (TEQIP) repository of course material?
7. **Would you like to visit IITK to participate in and develop course material (existing or new)?**

- **Definitely:** 67%
- **Maybe:** 21%
- **No:** 12%

8. **Would you like to participate in creation of the repository material (course file/lab Manuals/question bank etc.)?**

- **Definitely:** 67%
- **Maybe:** 30%
- **No:** 3%
9. How can IITK effectively help you prepare for teaching?

10. Which Subject do you teach?

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

- 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
- 24:1
- 22:24 (After TEQIP III recruitment)
- 25:1
- 20:1
- 1:60
- 24:1
- 24:1

12. How TEQIP can improve your teaching?

- By training us on various updated topics so that we can pass 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 1 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.

13. What problems you face in teaching?

- 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
- Problem in book collection.
- Lack of sources like smart classes/ cameras for virtual classes.
Research

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

2. Would you like to share/use research infrastructure at IITK, if made available?
3. Would you like to conduct collaborative research with IITK faculty?

4. Would you like lectures by experts (Indian and International) on niche research areas/ topics?
5. **Do you want special-topic conferences?**

![](image)

6. **How can TEQIP help improve your research?**

- 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, equipment 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 workshop on different topics.
- Journal papers, conference papers.
- Provide access to journal in my college.
- Funding, lab development in respective college.
- Provide our college access to some site like research gate, science direct and also software like ANSYS.
- By providing mentor ships to us from IITs professors.
- Allowing us to do part time PhD
- Allow us to workshops, seminars.
7. **Do you have V.I. lab as component in UG?**

   Yes: 01  
   No: 32

8. **Did this program help you to rejuvenate yourself as a teacher?**

   Yes: 30  
   No: 02

9. **Suggestions for national & international workshop at your institute.**

   - Definitely we want national & international workshop in our institute topic related to electrical engg.  
   - D.E.I can organize a national/international workshop on some topics like agriculture & green energy intervention, sustainability, optimize & maintenance of mini plants at D.E.I  
   - Such topics in a workshop may cover a lot of issues which generally arises around us in the society and within our institutes  
   - 3D printing (awareness of 3D printing among students and industries is to accelerate adoption rate)  
   - Practical applications of remote sensing GIs and GPs (different field of application)  
   - Quantity management  
   - MOOCS  
   - Virtual instrumentation  
   - It can be done in areas of AI, solar, thermal Engg, severe plastic, deformation, additive manufacturing, biomechanics, healthcare, water and air quality, etc.  
   - Yes it will help in development of institute and self  
   - Definitely time to time should conduct national & international workshop  
   - Conduct a national & international workshop which helpful for research in our institute  
   - If possible then conduct national and international in our institute  
   - Workshop on following topics may be conducted  
     - Agriculture and green technologies intervention  
     - Sustainability  
     - Air & water quality  
     - Operation & maintenance of solar & biogas plants  
     - Renewable energy  
     - Machine learning/ soft computing  
     - Course structuring of vocational courses.  
     - Sustainable technologies
Workshop

1. Clarity of communication about workshop

2. Organization of the sessions
3. **Quality of Lectures**

- Excellent: 65%
- Good: 34%
- Ordinary: 1%

4. **Effectiveness of discussions**

- Excellent: 57%
- Good: 43%
- Ordinary: 0%
5. **Effectiveness of learning experience**

   - Excellent: 57%
   - Good: 40%
   - Ordinary: 3%

6. **Workshop duration**

   - Appropriate: 78%
   - Short: 16%
   - Long: 6%
7. Would you like to have more such sessions?

8. Would you like e-lectures by experts on special topics?
9. Suggest Specific topic that you would like additional expert lectures on

- About seismic performance of building as per I.S. Code.
- Effective costing of construction
- One of the Structure Design
- Design of Earthquake resistant str. By various method as suggested by I.S Code
- Rainwater harvesting system
- Regarding career guidance ,research and development
- Regarding electrical engineering topics specification in power system & signal system
- More practical aspects
- MATLAB / SIMULINK
- Finite element method ,experimental stress analyses ,some software
- Application of finite element method in civil engineering.
- Modeling and simulation of structural element.
- Designing of earthquake resistant structures.
- Bridge Engineering
- Current trends in Electronic research
- Way forward in VLSI Industry: problems and solution.
- Current trends in electronics research.
- Way forward in VLSI Industry: problems & solutions.
- Core Subject should have more lectures.
- Academic Curriculum & UG research & engaging the UG students.
- Managerial skill is also required to handle the students.
- Lecture that focuses improvement of faculty members too.
- Soft skills research
- Research skills
- FDP( faculty development program )
- Research for young Faculties.
- Governance of TEQIP III at Institute level means work structure & responsibility of people.
- More detailed departmental presentation and teaching.
- NBA Accreditation
- Latest research topic in respective fields.
- Modern teaching technique.
- Academic curriculum and UG research and engaging the UG students.
- Topics of physics.
- I would like some additional expert lectures on chemistry related topics.
- I would like some additional lectures on mechanical related topics.
- Related to earthquake engineering and retrofitting.
- How to make project how to improve student entrepreneurship.
- Project related lectures by experts
- Recent research areas.
- Research topics.
- Startup and entrepreneurship.
- Research Guidelines and handlings.
- Academic curriculum UG research and Engineering the UG Students.
- More defeated departmental presentation.
- Research Guidelines and Start Up.
- Ergonomics, Thermal
• Linear algebra, optimization theory, modeling and simulation.
• A discussion on establishment of laboratory.
• After graduation which area for career is best how guide to the student.
• Lectures on Mathematical model for improving engineering problem and biological problem.

10. Additional Suggestions

• Arrange one more program related to their discipline (department Wise)
• Arrange lab practical workshop for college students( 7 Days at least )
• BE/B.Tech syllabus should be revised @ 5 yrs(in sixth yrs), for this a mechanism should be established
• Workshop and seminar for improving research skill for students.
• Placement more suggestion required.
• PFMS & DMSS training should be more.
• There should be one or two workshop on active learning program by IIT Kanpur because two-way collaboration with young faculty shall contain result in the programs of the institute.
• Please upload videos based as laboratory for mechanical descriptive
• Research collaboration for one month only.
• Some of the lab experiments should be teach during lab visit session.
• Conversion of our job from contractual to permanent.
• Chance to do PhD through TEQIP III
• Arranging e-class so that our students can learn from Prof. IIT's live along with the students of IIT
• Traffic analysis & design
• Traffic Modelling
• More suggestions are required regarding placement of the students.
• It will be great if IITK can help us in pursuing PhD.
• Provide regular workshop from IIT that give helps in research skills, projects for UG students.
• The duration in a day should be shorted
• Lab visits should be related to their area only.
• Monitoring of responsibility taken by TEQIP III personal at institutes
• Flexibility mutual exchange in funds in different needs.
• Please provide software which are used at IITK to TEQIP institutions
• Special training in I.I.T. Kanpur for the faculty of mathematics dept.
• Provide platform for higher studies.
• Help us in developing labs in our colleges give the general guideline for this.
• Student training at I.I.T. Kanpur.
• Training of faculty in I.I.T Kanpur in engineering chemistry department.
• Training of faculty in IIT Kanpur in mechanical department.
• Research collaboration.
• We want our job to be permanent and also salary should be 100000/per Month instead 70000/-
• To give some practical training to make UG level Projects.
• Provide some core research oriented direction or guidelines.
• Different opportunities to publish research works.
• Discuss discuss projects in B.Tech courses.
• Kindly provide software that are used at IITK, to TEQIP Institutions.
• PhD. For TEQIP faculty discuss current projects in B.Tech Courses.
• Summer vacation leave for TEQIP faculty for research work.
• Same tools and software should also be demon traded that can help as in research as well as in teaching.
• Allowing to because PhD With the job.
• How to manage the student and give the proper guide when the institute do not have sufficient lab and faculty.
• Kindly allow TEQIP faculty for summer and winter research program when normally class are not happen.
Teaching

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

2. Do you give class projects for UG classes?
3. Do you give class projects for PG classes?

4. Do you have sufficient resources for laboratory courses?
5. Is the library/journal/e-connection support adequate?

6. Would you like to have common (TEQIP) repository of course material?
7. Would you like to visit IITK to participate in and develop course material (existing or new)?

8. Would you like to participate in creation of the repository material (course file/lab Manuals/question bank etc.)?
9. **How can IITK effectively help you prepare for teaching?**

![Pie chart showing the distribution of help received. The categories are e-courses (38%), Workshops (43%), Content (18%), and None (1%).]

10. **Which Subject do you teach?**

- Surveying estimation
- Design of concrete structures
- Design of concrete structures
- Power system engineering
- Control system
- Power system, Signal system
- Digital Electronics
- Control System
- Engineering drawing, DR, CAD
- Design of Concrete structure
- Design of steel structure
- Network theory
- Electrical Instrumentation & Instrumentation
- Airport Planning & Design, Environmental Science, Construction planning, & Management, contract specification
- Manufacturing Science & Production
- Mechanics, material science
- Open channel flow, building science
- Power Systems
- Digital Electronics
- Digital Communications
Wireless Communications
Microcontroller
Engineering Graphics
Machine Drawing
Element of Mechanical Engineering
Industrial Pollution
Mathematics
Material science, Manufacturing, Dynamic of machine.
Strength of material, Structural Analysis.
Physics
Engineering chemistry
Dynamics of machinery of kinematics machinery HMT, TD.
Fluid mechanics and hydraulics.
Thermal engineering mechanical Engineering.
UTEP, EDC
Transportation engineering, engineering machines.
Data structure, Data mining, OOP
Theory of Automate, Cryptography, OOP
Thermodynamics I.C engine new traditional manufacturing.
Production engineering, Operation research, FM
Information security, Computer networks.
DME, SOM, Thermal.
Discrete mathematics and numerical analysis.
Analog electronics.
Kinematics of machinery.
Mathematics.

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

- 27:1
- 21:1
- 20:1
- 20:1
- 20:1
- 20:1
- 20:1
- 25:1
- 25:1
- 23:1
- 28:1
- 22:1
- 22:1
- 20:1
- 20:1
- 20:1
- 20:1
- 21:1
- 20:1
12. How TEQIP can improve your teaching?

- 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.

13. What problems you face in teaching?

- Providing mentorship in different societies
- Providing e-learning software
- Conducting Workshops
- Organize the workshops
- Definitely
- With the experimental details
- By organizing workshops.
- By organizing seminars regularly
- Sharing lectures notes & previous project topics.
- Providing net connection
- Provide access to e-Journals.
- Through help in upgrading library, e-Library
- E-journal subscription, lab support and Internet facility
- By organizing workshops on specific specialization.
- Providing Regular training.
- By providing platform for higher studies.
- By training time to time.
- By organizing faculty development program.
- Help in pursuing higher studies.
- By making part time PhD more flexible for regular faculties.
- To provide learning and teaching research.
- By training in different IIT’s.
- By training in different IIT’s.
- Financial help.
- Lecture of IITK classes.
- Workload in very high in our institution provide more faculty in our institution.
- Provide more faculty in CSE Department we are base in person.
- By working part time PhD more flexible for regular faculties.
- By arranging more sessions.
- Provide more faculty in department CSE, Workload is very high.
- Use more mathematical aspect.
- Learn a lot of lecture by senior faculty of IITK in different field of research.
- Lectures provide by faculty very motivated.
1. **Would you like to visit an IIT for a short visit/internship/post-doctoral stint, if offered (via TEQIP)?**

   - **Definitely:** 86%
   - **Maybe:** 11%
   - **No:** 3%

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

   - **Definitely:** 92%
   - **Maybe:** 8%
3. Would you like to conduct collaborative research with IITK faculty?

4. Would you like lectures by experts (Indian and International) on niche research areas/topics?
5. **Do you want special-topic conferences?**

- Yes 93%
- Maybe 7%

6. **How can TEQIP help improve your research?**

- Getting e-connection support, enrolment for PhD course, seminar on department topics
- Providing National/International Journal and e-connection support
- Providing more support regarding lab facility infrastructure & Journals
- Regarding the discussion of teaching method and research field.
- By giving funds for workshop organizing.
- Collaborate effort with at least one faculty of IIT Kanpur.
- Provide net connection and a system and access to e-libraries to read the relevant material to my research.
- We can be made to come to IITK during vacations for summer. Also TEQIP can arrange part time PhD for us.
- By making part time PhD more flexible for regular faculties.
- By providing support regarding lab facility, infrastructure and e-journals.
- By providing support of equipments as our college doesn’t have such equipments.
- By helping in pursuing part time PhD.
- By motivating various e-courses & training for research projects.
- By Funding
- By providing platform for higher studies
Interaction with different industries.
Workshop on latest research topics.
Involve in project running in IIT Kanpur.
To strength laboratories of institute.
By funding
By providing access of different research journals.
By providing facility to pursue PhD.
By providing infrastructure for research in our collage.
By providing e-Journals, to our college.
By providing various e-courses and Training for research programs.
By providing in fracture for research in our college.
Giving time to do research.
Till now not but hope for the best.
Faculty for IIT may deliver expert lecture on specific topics in Institutes like ours.
By allowing 1 month research on selected topics.
Know and see the different lab of IITK & interact with PhD & M.Tech Students of IITK about their research.

7. Suggestions for national & international workshop at your institute.
   - It is pleasure that national workshop organized at our institute
   - Getting provision to attend international workshop at any institute
   - At my institute only national workshop may be held after developing all basic infrastructure, international workshop may be held
   - Yes, Providing more support regarding lab facility infrastructure & journals and ideas are required from IIT Kanpur
   - Ensure all Faculties and all students should be collaborate to the industrial filed and also with rural field problems.
   - We would like one workshop in my institute by experts from IIT Kanpur
   - At least one national or international workshop must be done by tier-in institutes in each semester.
   - Vibration control in structures
   - Retrofitting of masonry structure.
   - We are going to have a national conference in November. Though collaboration with any IIT we can organize a national conference in our institute (Vibration control in structures, retrofitting of masonry structures.)
   - Currently I would not suggest any international workshop at our institute (chhapra) but small scale workshop can be organized on various software tools and techniques.
   - Helps in improving the funding & sponsoring agencies for national & international workshop.
   - Collaboration with various reputed Institutes for conducting workshops.
   - Yes we want to organizing such type of workshop in out institute and for that purpose make suggestions and ideas are required from IIT.
   - Yes, we can organize national level conference as per present condition
   - National conference on advances in mechanical Engineering.
   - We would like to start with national workshop on flood management, and water harvesting.
   - Workshop related to solar cell. Workshop related to projects related to rural development area.
   - Workshop related to projects using software.
   - By allow the faculty to use research infrastructure of IITs and by interaction with professor in specialized area.
   - Workshop related to software in specific area should be conducted like ECE Micro-controller based workshop, which will help student in their projects.
   - We are planning to organize such type of workshop in our institute.
   - Initially National Workshop should be conduct at institute level covering the topics like alternative of plastic bags water conservation, global warming, how to save dying rivers and ponds use of renewable energy etc.
   - Help in improving the funding and sponsoring agencies for national and International workshop.
• Collaboration with various reputed institutes for conducting workshop.
• I.I.T Kanpur may help in organizing national and international at institute.
• We are planning to organize seminar on national level in different disciplines in Darbhanga college of Engineering Darbhanga.
• We are planning organize seminar on national level in different disciplines of DCE Darbhanga.
• National conference on (a) Vibration control of Structures (b) Retrofitting of masonry structures.
• We also want to conduct both national and international conference in our college.
• Conference/workshop on possible career opportunity.
• Recent projects and objectives of research for CSE Students.
• We are proposing a national workshop on recent trends on Information and Computer systems.
• Help in improving the funding and pursuing Agency for national International workshop.
• Workshop on centralized to Decentralized database.
• Collaborative projects with IIT’s.
• Matlab workshop, workshop on embedded system.
• Yes, lab should be developed as per designed curriculum and day to day changing of technology , with the help of IITK in our college.
1. **Clarity of communication about workshop**

   - **Excellent**: 35%
   - **Good**: 50%
   - **Ordinary**: 15%

2. **Organization of the sessions**

   - **Excellent**: 18%
   - **Good**: 58%
   - **Ordinary**: 24%
3. **Quality of Lectures**

- Excellent: 32%
- Good: 51%
- Ordinary: 17%

4. **Effectiveness of discussions**

- Excellent: 25%
- Good: 57%
- Ordinary: 18%
5. **Effectiveness of learning experience**

- Excellent: 19%
- Good: 59%
- Ordinary: 22%

6. **Workshop duration**

- Appropriate: 65%
- Short: 13%
- Long: 22%
7. **Would you like to have more such sessions?**

- **Definitely**: 45%
- **Maybe**: 33%
- **No**: 22%

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

- **Definitely**: 68%
- **Maybe**: 24%
- **No**: 8%
9. **Suggest Specific topic that you would like additional expert lectures on**

- Control system solar cells.
- Internal of things, wireless semen networks, Wireless & Wind computer network machine learning computational intelligence and engg. Areas of AI
- Start-up activities training & placement project/ R&D works.
- Physical metallurgy solidification
- Lowest products / solution for agriculture
- There should be a session on research laboratory and facilities available at IIT Kanpur specific to particular department
- Governance, digitization, subject Domain, Research methodology.
- How to make the institute political free corruption free and castes free
- How to boost up the quality of students.
- How to make good human being
- Physics & soft material lab
- Microwaves communication engg. (analog & digital optical comm. Information theory.
- The application of modern equipment in the teaching
- Also include the concept of various branch.
- Revision of curriculum and management of department organized.
- Expert lecture in “ The best way to utilize TEQIP-III grand in our organization
- Active learning, interactive learning
- In the area of advanced machining and some computational techniques used in research
- Codes for distributed storage ,modeling & simulation ,
- How to make state colleges/ university corruption free
- How to make them free political interference
- How these colleges can envolve as more transparent examination & evaluation
- Materials processing and its advanced characterization techniques.
- Mathematical modeling and simulation of Intraocular flow phenomena.
- B.Tech Project.
- Manufacturing processes.
- Active learning and engagement of UG students for project.
- How to motivate the students for attending class interdisciplinary or multidisciplinary education role.
- How to encourage students to put their best effects for subject knowledge, Project etc. Curriculum development with industry interaction.
- Active learning and engagement of UG students for project.
- Same lecture may be taken for effective teaching experiences.
- Lecture must be on same motivation on the responsibilities of a good teacher.
- Mathematical modeling research methodology.
- Specific department introductions regarding more practical issues.
- Lecture on humanities and social science subjects should be included.
- If also required some experimental work.
- Outcome based education, Innovation theory + practical, training and placement.
- Active learning/Interactive learning student psychology.
- Communication skill and their solution/real problem associated with mechanical components and their design.
- Process intensification and process integration, green and clean technology, Reaction engineering and cat-analysis.
- Computer vision internet of things.
- More practical sensors may be on duded.
- Training on IOT ,high performance computing Lab ,functioning of TEQIP-cell in IITK.
- Computational research work using ANSYS, Artificial Neural Network fuzzy.,Genetic Algorithm, Experimental
Techniques.

- Branch specific course outline is appropriate.
- Subject of electrical engineering that are control system, communication system, DSP, EMT and also research related.
- Teaching Methodology, computational soft ware for research.
- Future Aspect vision of TEQIP.
- Material characterization.
- Active Learning.
- Laboratories Modernization simulation.
- Computational model on related topic i.e. thermal system, combustion ate.
- MOOC’S.
- Data science & Analysis M/C learning.
- Bioprocess engineering downstream processing.
- Process control and design.
- IOT in computer science machine learning.
- Pedagogy, Environmental Engineering.
- Advanced Electronics device.
- Dynamics analysis of structure earthquake research design.
- Mathematical computation using software tools.
- Applied remote sensing for city Development.
- Active learning.
- Communication skill.
- Leadership development.
- Image processing.
- Skiuing of some tools software.
- Procedures followed in IITK e.g. for purchase maintenance of lab equipments.
- Problem designing and analysis methods related to polymers
- Operation Control ,quality and security of power systems
- Electric drives
- Some lectures should have been on educational development, national policy etc.
- How to develop research environment at our universities.
- Innovation & Incubation through teaching learning process.
- Computer Oriented based courses.
- Courses by Prof Nitin chemical Engineering.
- Courses on Optimization.
- Material processing Techniques
- Process Engineering with exposure of specific industrial chemical process.
- Use of computers in chemical engineering education.
- Research
- Good governance lectures/ workshop especially for head of Institution only.
- Material Science.
- Flexibility in course structure atpremium institution and it can be usefully introduced to autonomous Institution.

10. **Additional Suggestions**

- It is request to organize software related training programmer to enhance the research capacity of facilities it IITK. Our in our institute with the help of IITK,
- It is request to provide hand hold support to the faculties of our institute to complete their Ph.D & enhance their research activities at our institute.
It is requested that IITK to be the mentor for growth of our institute by processing necessary support to change all. Various labs provide necessary guidance in terms of various academic & administrative activities.

May well Planned

There should be more discussion on set up of various laboratories and design of experiments for UG and PG programs

Such programs should be short and compact, limited to not more than 2-3 days; fowling during Friday, Saturday & Sunday.

Experts visit department at satellite stations to more actual feel of the problems and have feel of environment to get first hand suggestion one month one department visits.

Some lectures should be 1st year students their problem & solution

Some lectures should be on physics, chemistry or department of applied science

More lectures on specific description or speculations by splitting the batch according to specific disciplines may be organized

The content of generalized training program should be specifically general.

Session of contents should designed in such a very that they should designed in such a very that they should be effective and useful for senior faculty member position of the institute

Some major improvements are required at our institute.

Faculty recruitment, facilities required for faculty, infrastructure improvement, motivation for research and other activities.

This type of program may be organized is some better weather conditions.

Program should have been with specific objectives & out come based rather than just general & outer motivational. Mind it that you have called almost 90% (or more ) faculty from HBTU / BIET was there such necessarily? The talks & visits relevant to a particular department could have been completed is just 1-2 days. Where you have kept the whole college/ university hostage for full week. We in state colleges already facing shortage of faculty, in such situation it is never admission that 90% faculty is called for one week

By providing sponsored research scholars.

Co-operate us for AICTE approval of GCE, Keonjhar.

Time to time organization such like of training for the faculty member. How to improve the quality of education in state engineering inlilution

Timing should not extend after 5:30 PM.

The focus of the training should be, how we can implement the suggestions in our college by the help of TEQIP.

Providing more information on the TEQIP support, how can us approval for TEQIP fund.

Duration of lecture should be short.

That training program could have been more towards Active learning. The lecture, topics uses not of much use to us.

Duration of program can be short.

Speaker should be of high repute with good management of interactive session.

Should have clarity of the subject and well proposed.

Specific both for specific program.

Kindly do not arrange program as per the availability or feasibility of faculty members of hosting institute.

Objective of program should be clearly defined.

The workshop should be very specific rather than in general. The emphasis must be given on designing a suitable syllabus and a collaboration with the institutes for using facilities of IITK for UG and PG students so that the output of the enter enation can be improved.

I am senior professor computer science engineering, topics like physics, chemistry & material science etc. are not required to teach.

The workshop may be of two weeks.

Program must be branch specific or subject specific.

Information related to all scheduled training program at IITK should be circulated to all TEQIP institutions.

We request you to help if any in development of our college.

GEC keonjhar in terms of faculty members Labs & research.
Detail discussion for Lab experimental. Produces for conducting advanced experiments, discussion on observation of experiment department.

- Various IIT most adopt the more institutes to develop them as model institutes. More they must help in established the Lab, Infrastructure etc.
- Contents are good however some specific problem may be included.
- Could be better planning.
- Better if workshop/training program is organized being specific to branch of engineering technology.
- Such program should be conducted twice in a year.
- The contents & labs should area specific.
- By providing funds to develop labs & interaction between our institutes expert.
- Program should be specific and not to be merged with additional subjects/branches.
- May include on pedagogical aspects, educational management etc.
- Please do not mix all branches in a single slot no content for electrical engineering
- What is passive learning in classroom, what factors/contents to promote active learning
- What is active learning in the classroom?
- Instead of theoretical classes practical training having the concept of idea, innovation, integration and implementation should be organized and at least one active project should be assigned to each faculty to member in order to provide the active training for learning.
- Workshops on CFD, as per and other relevant topics in Chemical Engineering.
- More interaction & hands on experience in research laboratories could be made possible with increasing the course period to certain extent.
- Very few sessions in this workshop were relevant and useful for me. The sessions should be so designed that they are relevant and useful.
- In state government there are issues of merit not appreciate (rather reverse of it happens), no human resource management (HRM) policy in place. Raise morale and motivation of faculty, productivity etc.
- Subjective lectures should be organized to make it more effective.

Teaching

1. **Do you have additional support for teaching (tutors, graders, teaching assistants, etc)?**
2. **Do you give class projects for UG classes?**

![Pie Chart showing 73% Yes, 27% No]

3. **Do you give class projects for PG classes?**

![Pie Chart showing 73% Yes, 27% No]
4. Do you have sufficient resources for laboratory courses?

- Yes: 39%
- No: 61%

5. Is the library/journal/e-connection support adequate?

- Sufficient: 39%
- Inadequate: 61%
6. Would you like to have common (TEQIP) repository of course material?

- Definitely: 64%
- Maybe: 34%
- No: 2%

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

- Definitely: 71%
- Maybe: 28%
- No: 1%
8. **Would you like to participate in creation of the repository material (course file/lab Manuals/question bank etc.)?**

![Pie chart showing participation levels](chart1.png)

- Definitely: 73%
- Maybe: 21%
- No: 6%

9. **How can IITK effectively help you prepare for teaching?**

![Pie chart showing preparation methods](chart2.png)

- Workshops: 43%
- e-courses: 38%
- Content: 18%
- None: 1%
10. Which Subject do you teach?

- Introduction to Digital Electronics & Electrical Engg, Electrical Machines / Control System/ communication (analog & digital) optical communication
- Microwave Engg/ physical metallurgy phase transformation
- Network security in CSE department.
- Electronics Control systems left computing.
- Dynamic of machine FEM, fluid mechanics, hydraulic structures.
- Biochemical engg. Core subjects Bioprocess Engg. Bioreactor design etc.
- Polymer, Machining science (PG) advanced machining processes (UG)
- Signal analysis random processes analog & Digital courses.
- Strength of materials, manufacturing science.
- Discrete mathematical structures numerical methods probability, stochastic processors.
- Geotechnical Engineering
- Manufacturing processes CAM
- Mass transfer II
- Engineering mechanics and Theory of M/C.
- Engineering materials, network analysis and basic electrical engineering analysis.
- Transportation engineering and concrete structure.
- Transportation engineering and environment engineering.
- Heat transfer, chemical engineering and Fluid mechanics.
- Integrated circuits, Digital signature of providing.
- Electrical engineering
- Mathematics.
- Fluid mechanics hydraulics engineering graphics.
- Economics and management
- Manufacturing process.
- Paint technology.
- Chemical technology/ paint technology.
- Basic manufacturing process, PDPT, MST, BME.
- Advance separation processes and industrial pollution monitoring and control.
- Computer graphics & computer architecture.
- Manufacturing process.
- Data base management systems.
- Java & advanced java programming wireless sensor networks.
- Heat transfer, fluid mechanics.
- Surface mining, Rock Mechanics.
- Network theory, control system, Advanced control system.
- Basic Electronics, control system, communication Engineering.
- Mechanics, Mectronics of Solid Machining, technology, Measurement.
- Material science and metrology.
- Physics.
- Advanced foundation Design New construction materials.
- Algorithm.
- Computer science and engineering.
- Biotechnology
- Digital Image processing
- Chemical engineering
- Electronics engineering
- Structure analysis
- Waste Management
11. What is average student to teacher ratio in your institute?

- 27:1
- 35:1
- 28:1
- 1:22
- 60:1
- 30:1
- 1:20
- 28:1
- 1:30
- 15:20
- 1:30
- 15:1
- 1:15
- 1:24
- 40:1
- 35:1
- 20:1
12. How TEQIP can improve your teaching?

- By providing better infrastructure.
- By collaboration & signing M.U.V.
- E-course and organizing some workshops.
- Practical understanding of concepts
- By providing the basic lab. Facilities and updated course materials
- Providing funds facilitate organizing & attending workshops.
- By providing additional staff/ technical staff/ manpower. It will make faculty save their time for teaching / research rather than keeping them involved in classical jobs & other allied jobs in the department.
- By conducting FDP and workshop.
- By providing exposure of state of art of more relevant topics required for UG/PG.
- Active learning program.
- By provide course material.
- By providing fund for necessary lab setup.
- By workshop on effective teaching and how to motivate the students.
- Provision of e-courses.
- By providing fund for necessary lab set up.
- By conducting more workshops on active learning.
- By organizing such workshops
- By discussion on our teaching contain place.
- Providing technical Assistant.
- By giving technical assistance.
- Workshops and E-courses.
- Reducing other than teaching learning/Research work.
- Teaching faculty members should be given time to interact with students.
- By giving permission to procures lab institutes.
- By providing teaching aids such as good quality black board using both chock and marker per class room with projectors, In case the air-conditions class rooms were designed, it will be much better.
- E course
- Remote lecture & interaction with students & faculty.
- Organic training programs workshop on subject specific areas for all the engineering streams (ME, CSE, EE etc.)
- Through E-course & workshop in IITK.
- More branch specific training to teacher of IITs.
- Through TEQIP By conducting more workshop and other activates to improve.
- Providing financial support to develop Lab Improving quality of both teacher and students.
- By establish our Lab at their end by adopting institutes.
- By providing better working environment or wok place for faculty.
- By organizing such type of workshop regularly.
- Specified core subject workshop
- In terms of knowledge
- Workshop should be specific specialization
- By providing resources for E-learning
- By providing smart classes field trips etc has improved teaching.
- Short term course on recent development
- Interaction/ Discussion with IITK faculties.
- With Sufficient Funding.
- More pedagogical lectures required.
- Provides resources at various level.
- Please demonstrate a few outstanding lectures / classes.
By providing the required resources.
Faculties shall not involve too much in TEQIP activities
By making my courses element to the use of Industry.
If it would improve institutional governance.
By Providing e-courses & workshops.

13. What problems you face in teaching?

- Providing mentorship in different societies
- Providing e-learning software
- Conducting Workshops
- Organize the workshops
- Definitely
- With the experimental details
- By organizing workshops.
- By organizing seminars regularly
- Sharing lectures notes & previous project topics.
- Providing net connection
- Provide access to e-Journals.
- Through help in upgrading library, e-Library
- E-journal subscription, lab support and Internet facility
- By organizing workshops on specific specialization.
- Providing Regular training.
- By providing platform for higher studies.
- By training time to time.
- By organizing faculty development program.
- Help in pursuing higher studies.
- By making part time PhD More flexible for regular faculties.
- To provide learning and teaching research.
- By training in different IIT’s.
- By training in different IIT’s.
- Financial help.
- E-lecture of IITK classes.
- Work load in very high in our Institution provide more faculty in our Institution.
- Provide more faculty in CSE Department we are base in person.
- By working part time PhD. More flexible for regular faculties.
- By arranging more sessions.
- Provide more faculty in department CSE, Workload is very high.
- Use more mathematical aspect.
- Learn a lot of lecture by senior faculty of IITK in different field of research.
- Lectures provide by faculty very motivated.
Research

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

   - Definitely: 70%
   - Maybe: 24%
   - No: 6%

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

   - Definitely: 90%
   - Maybe: 10%
   - No: 0%
3. Would you like to conduct collaborative research with IITK faculty?

- Definitely: 93%
- Maybe: 7%

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

- Definitely: 92%
- Maybe: 8%
5. **Do you want special-topic conferences?**

6. **How can TEQIP help improve your research?**

- By funding for Travel grant to calibrate with researches
- To arrange national international conference
- To develop new lab
- To replace the old equipment with new one
- By reducing non-teaching / non-academic load assigned to us.
- According us in respective departments for a particular span & surprising us
- By increasing the faculty strength and developing our lab equipment
- Part time PhD for assistant professors (Qualification undergraduate)
- By sharing the experience of senior faculty of IIT’s
- Collaborative research and exchange of research & under between IIT and our institutes
- Mathematical, Energy, enterable news ship development concept in management, patenting / IPR teaching & research is state colleges (in up at least) have determined due to shortage of faculty & staff. We have only one staff (or with no staff) in department. They are everything from head to tail of the department. Teaching can improve if sufficient & capable faculty are recruited through transparent process. Recruitment process at present is very corrupt due to which is many state university even if recruitment is done it is later cancelled by high court.
- Collaborative research work with other Institutes.
- To provide different types of research and project work.
- By providing fund for the same.
- By conducting the special expert lecture/conference related to material synthesis and manufacturing technics.
- By provision of collaborative research.
- By providing fund for the same.
- By conducting collaborative research with other IIT’s.
- By providing collaborative facility IIT for our students.
by providing support for equipment’s.
by developed a new lab and help to faculty.
providing research fellowship to the research scholars to improve research environment.
by providing used money any other financial help.
by providing financial assistance.
collaborative research projects.
furnishing suitable teaching faculty along with nonteaching staff.
collaborative research.
by providing fund for develop lab.
by providing analysis facilities at free of cost or at lowest possible rate. Giving permission to use the lab facilities at IITK for PG students.
visit vision IITs interactive with faculty members.
to organize program for the faculty members who do not have PhD. & also allow the TEQIP Institutions to collaborate with more IITs for their research.
if TEQIP arranged workshop in IITs for teaching software use on research work like ANSYS, FUZZYLOGY.
allocating sufficient seed money for research activity in departments.
to supporting us for a particular space of time give financial support for research work.
by conducting workshop on research related topics etc.
by up gradation of qualification of young faculties, support to conduct Workshop notated to research.
providing facilities procured by IIT and our institution by adopting the institutes, providing facilities so that overloaded may be shared.
as IIT have very good lab facilities expertise so they may be very helpful in research.
by organizing such program periodically.
by making research labs and facilities available at my institutes.
by more funding research project at M.Tech level.
by providing facilities and guidance.
through E-learning /E-course.
by providing facilities and collaboration research for faculty and students as way.
providing funds & infrastructure.
international support & PhD students should be given.
by providing software, equipment as were as financial assistance.
IITs have good lab facilities experts and other facilities laboratory etc. that may be useful for TEQIP.
by providing funds to develop labs & funds to do experiment at other institutes.
with help of TEQIP we go for IIT to content for their current research trades.
by providing summer internship at IITs for faculty.
share /use of IITK lab/ research infrastructure for some experimental work.
with appropriate funding.
by way of organizing more specific workshops & conferences.
by providing funds.
by helping TEQIP scholarships to our researchers.
by providing me an opportunity to work / research at IIT/IISC.
by providing the required resources.
by providing facilities & collaboration with labs of IIT.
too much delays in recruitment process, effectively very less.
by providing proper Funds.
by sponsoring our R&D projects UG Projects and M.Tech dissertations.

7. Suggestions for national & international workshop at your institute.
- Workshop are very useful which are to be organized at our institute and infinite must fund candidates to attend these a based.
We would like to held workshop / FDP on Internal od things in on department at CSE department, HBTU Kanpur under TEQIP-III.


Two weeks workshop on MATLAB & other software for faculties to carry out the research activities. Workshop for students to carry out their project courses the students for carrier development their communication skill.

We should organize national and international workshop at our institute area of research & training chemical technology.

Number of faculties at our institute are in adequate an in experienced to organize international conferences. Some good faculty at associate & professor level is required to conduct such events.

By collaboration with it’s other institute

A National level seminar/ workshop may be organize in the department of Biochemical Engg. H.B.T.U. Kanpur.

Such type of workshops may be conducted with the help of IIT at mu institute BIET Jhansi.

This experts and resource persons may be arranged effectively with the help of IIT Kanpur. But at our institute, they are not paying money to the experts as per norms. we have not also such type of norms in written form.

May be organized in future.

May be organized.

For civil Engineering department GEC, Keonjhar is not AICTE approved if no AICTE approval

Nothing is funded from TEQIP. Kindly resolve the problem, So that we people also able to conduct national/International conference through TEQIP.

More no of workshop to be organized for college teachers.

National/international workshop should be there in the inmp on epm basic to improve the teaching and research actives for the faculty members.

Shortage of space in our college restricts us from conducting these workshops.

These types of workshop mat be very helpful.

International workshop should be organized.

Workshop on teaching methods and improving attitude of teachers and students towards technical learning.

National and International workshop should be organized at our Institute.

With the collaboration with KIT, IITK may help in improving quality of workshop.

Topics of humanities and social sciences can be included.

Some collaborative national and International workshop with IITK may Organized.

Yes, and should like to have at least one International workshop in a year and 2-3 National workshop.

We are organizing National/International conference/workshop in my there area.

Liberty to use the funds/interference of fiancé department?

We are trying to arrange workshop in every semester.

Such types of conferences should be organized by each and every department of the university/institute regularly. As such no schedule is find, schedule must be finical for the conferences at that a year or rise month before organizing the conference. Since funding always create problem, funding must be given of advances for smooth conduction of the conferences.

We want to conduct national and international workshop at HBTU Kanpur.

Tribology Nano Material etc.

We need to support from IITS to conduct national /international workshop at our institutes.

International conference in the month of Sep. 2018

Workshop on Matlab, etc for faculties as well as students on the month of Dec. 2015.

Two weeks FDP programme may be connected with collaboration IITK to our institutes if possible permission given IITK in GCE, keonjhar

It is required to conduct in institute with interaction to other institutes

M/C learning & Big Data Analysis.

If sufficient funds are made available such workshop can be organizer.

We will be conducting if at our department.

Yes, on advanced Electronics device.
International workshop/ conference could be planned under TEQIP.
We already had done international & many national conference on our institutes.
We are going to plan workshop in our institutes on future.
There are many faculties who are interested to organize national /international workshop in our institutes on due to non clarity of rules & regulation available for expenditure toward conduction the workshop they are thinking in number of time before proceeding.
We want to conduct national and international workshop at HBTU Kanpur.
International workshop and hands on practice
Such type of workshop could be organized provided sufficient resources/ support in given by institutes.
Need assistance /help to organize national international conference /seminar/workshop.
We shall send proposal to respective department of IITK for the jointly combined organized the workshop.
International more shop should be conducted on our institutes so that we are come contact with the teaching, learning communicates regarding technical subject by inviting expert from IITs and outside if.
National and international workshop should be organized of our institutes at regular intervals.
We want to conduct international/ national workshop with collaboration with IITK and we want your support in conducting this.
Financial support is required
By organizing IEEE conference with the help of IITK at international level.
Workshop should be more specific and on focused topic with expert lectures by experienced speakers
We would like to conduct IEEE conferences on Multilevel Inverter with the help of IITK.
For that I am totally disappointed with IITK because of total unprepared faculties.
Workshop on innovation & incubation through teaching-learning process in Electronics Engineering.
International conference on recent advances in chemical Engineering and National conference on “Industry Institute interaction” topic can be as per requirement of the Industry.
An International workshop on “Emulsion Polymerization”

8. Any issues you face with TEQIP program at your institute?
No clear guideline for presenting paper international level.
It is requested to provide faculties in each branch to maintain the faculty student ratio 1:20. It will serve as a substitution against the vacated posts also.
TEQIP guidelines regarding use of allocated funds are not clear at our institute.
No effective cooperation of entire faculty
Lab staff are inadequate to handle laboratories developed under TEQIP
Payment issue is always embossing
This is in the hand of small group.
Insufficient support to applied and basic science stream in TEQIP- III rd Phase
We don’t know absent the seed money given to the students as well as faculty for starting a project. Also not well defined process to utilized/ spend the TEQIP-III grant in the most efficient manner.
Approvals on proposals submitted faculty member should be time bound
The TEQIP norms re required in writing so that we say able to know that what can be procured from TEQIP.
The processing of approval for attending the courses seminars and conferences is very slow. Sometimes the actual dates are passed out but use do not get approval or any information.
Payment related issues (College takes too much time to reimbursement of research projects )
TEQIP Co-coordinator don’t know anything, Even if know TD/DA rule correctly.
Funds for M. Tech thesis and PH.D students for their research work.
The main issues we are facing are the extreme shortage of regular faculties and staff.
Lock of information regarding the find available for attending the international computer/workshop abroad.
I am not aware of IIM’S training program as for TEQIP.
The main issues we are facing are the extreme shortage of regular faculties.
A workshop may be conducted for clearing the things what can be we do and what not in TEQIP, in each institute under TEQIP.

Nothing.

I think they should study the TEQIP-III documents more deeply so that the TEQIP-III can be practically applied.

No system has been adopted and communicated to faculty every time we have to start our query from zero.

Yes, the teachers have become more a clerk than a faculty member as per for every data teachers have to run from table to table and complete the data.

Less circulated information/academic is suffering.

No transparency/ not cut rule and regulation.

The money for each and every phases of TEQIP is allocated for doing some specific tasks. Since we don’t have adequate infrastructure viz. faculty sitting rooms, lab facilities and others. I think that these must be developed firstly for the proper and effective utilization of funds. Being very honest, I feel that a huge amount of money was spent by the government in attending this conference. If I ask for some money for miscellaneous expenditure such as papers & pens for making notes (stationary items), photo copying & printing facility for making quizzes, giving assignment & related facilities, allowances for buying books. No such money is given to us. I think that some money should be given to facilities for stationary items, photocopying, printings and professional updating allows. It would certainly help in enhancing the teaching quality & relevant outputs.

Lack of information

Communication of information

Most of the unaware with the program provided by TEQIP

Policies have not been defined by NPIU for some of the components / activities like.

NO, Information is provided like what are the grant under TEQIP and how it can be utilized for the research purpose or education quality improvement.

In my institutes the understanding of TEQIP is like, it help you monetarily to do some activities but I think the good of TEQIP is much more than that.

Allocation of sufficient seed money for infinity research in department is essential for appropriate outcome.

We were facing problem in procurements due to BOG formation was not done recently it has done procurement of equipment are not done till now.

Purchase Methods are not friendly

TEQIP funding to sciences departments by increasing.

Funds allocation is not clear as well as how to split it.

Not full utilization of equipment.

In TEQIP III since there is no provision of advance, so it is very difficult to organize any event because need of advance is required for organizing any event.

9. Any other questions?

No Internal of things, wireless semen networks, Wireless & Wind computer network machine learning computational intelligence and engg. Areas of AI.

Can I avoid the facility to work in Dept. electrical engg. IITK for an adequate span time to carry out my research works?

Can I get assistance to complete my ongoing Ph.D

Can I get guidance to bring different centrally funded projects to my institute & department?

Can we send our students to IITK during summer / winter break to have an exposure to the IITK. Environment? If Yes, what is the procedure?

Can we send our students to IITK to carry out their project works! It Yes, what is the procedure?

Can we get guidance to organize different National/ international level seminars / workshop/ conference? It yes, what is the procedure?

Must of the faculties have M.Tech degree in institute, and due to storage of faculty member they are not getting chance for their carrier up graduation. Hence scope may be given to them to do their Ph.D. (part time Ph.D)

How applied science/ basic sciences stream can participate effective in TEQIP-III rd phase
What happened to the suggestions/feedback given in the previous TEQIP supported programs?
Project related to students should be decided on priority basis. Information about TEQIP should be circulated in advance.

There should be some seed money for the faculty so that he/she may arrange basic facilities for him.

Infrastructure development such as drinking water facility, toilet facility are required to converted.

The rules and regulation for the faculty are not clear.

TEQIP cell is required to be more active.

The culture of research is required to develop. It is totally missing.

There were deviations at least 4-5 from the schedule provided is the designing of the program this should have been avoided.

Many lectures talks (at least 4-5) as specified is your time table were are not conducted. Many speakers at least 4-5 did not turn up for their talks. It was very disappointing.

Kindly suggest the state/control government to promote us properly. So that we can also with stand with various IITs.

Each faculty member should have basic facilities like printer, laptop, paper etc.

How P.HD students can be associated in TEQIP program?

The hospitality is really good.

Do you provide support for P.HD students to work at your Institute?

TEQIP is assisting the institution/university by way of funding is the fund solely responsible for improvising the quality of education?

How can a teacher perform his basic duty of teaching and research honesty if he is involve in various other non-academic activities?

Measure to check the quality improvement in technical education.

Why a big amount of money is consuming for a single person, who is attending TEQIP program? That amount should be used for interaction both premier institute students of state government college.

Why the senior faculty members of NIT’s and IIT’s do not go to AICTE approved Government College for same types of interaction? It will help faculty members to modify their teaching styles.

Has the program schedule prepared as per qualification or teaching area of participants?

Motivation to faculty

Is there any provision for young faculty to got financial assistance for him registration fees from TEQIP III.

Is there any scope for a student to do him B.Tech project at IITs, from TEQIP implemented institution?

Batch should be small approx 50.

Time table given should be followed.

Why do you organize common program to all streams?

What policies do you have for reimbursement of money to students for various academic activities under TEQIP or other then TEQIP if you any criteria, please provide me.

It there any program for engineering stream, if yes what is the process for taking admission.

TEQIP should help faculty members to use more resources from other good institutes like IIT and NIT. TEQIP should also initiate faculty exchange program among the institute which are under TEQIP.

There should be clean cut instruction available on line to all which mention the following points.

Regular faculties and lab assistant are great problems in our institutes. In addition to that there is no. advance labs in our institutes. TEQIP should take interaction to & all these as early as possible, so that we as well as students of our students of institutes get benefit and they comeback with other best institutes.

How the students take advantage of TEQIP what are the areas where they can explain & holders the hand of TEQIP.

Is there any facility for PhD work under TEQIP in state govt. college who are having Master degree?

No clear guideline for presenting paper international level.

It is requested to provide faculty in each branch to maintain the faculty student ratio 1:20. It will serve as a substitution against the vacated posts also.

TEQIP guidelines regarding use of allocated funds are not clear at our institute.

No effective cooperation of entire faculty.
Lab staff are inadequate to handle laboratories developed under TEQIP
Payment issue is always embossing
This is in the hand of small group.
Insufficient support to applied and basic science stream in TEQIP- IIIrd Phase
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Approvals on proposals submitted faculty member should be time bound
The TEQIP norms re required in writing so that we say able to know that what can be procured from TEQIP.
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Payment related issues (College takes too much time to reimbursement of research projects )
TEQIP Co-coordinator don’t know anything, Even if know TD/DA rule correctly.
Funds for M. Tech thesis and PH.D students for their research work.
The main issues we are facing are the extreme shortage of regular faculties and staff.
Lock of information regarding the find available for attending the international computer/workshop abroad.
I am not aware of IIM’S training program as for TEQIP.
The main issues we are facing are the extreme shortage of regular faculties.
A workshop may be conducted for clearing the things what can be we do and what not in TEQIP, in each institute under TEQIP.
Nothing.
I think they should study the TEQIP-III documents more deeply so that the TEQIP-III can be practically applied.
No system has been adopted and communicated to faculty every time we have to start our query from zero.
Yes, the teachers have become more a clerk than a faculty member as per for every data teachers have to run from table to table type and complete the data.
Less circulated information/academic is suffering.
No transparency/ not clear-cut rule and regulation.
The money for each and every phases of TEQIP is allocated for doing some specific tasks. Since we don’t have adequate infrastructure viz. faculty sitting rooms, lab facilities and others. I think that these must be developed firstly for the proper and effective utilization of funds. Being very honest, I feel that a huge amount of money was spent by the government in attending this conference. If I ask for some money for miscellaneous expenditure such as papers & pens for making notes (stationary items), photo copying & printing facility for making quizzes, giving assignment & related facilities, allowances for buying books . No such money is given to us. I think that some money should be given to facilities for stationary items, photocopying, printings and professional updating allows. It would certainly help in enhancing the teaching quality & relevant outputs.
Lack of information
Communication of information
Most of the unaware with the program provided by TEQIP
Policies have not been defined by NPIU for some of the components / activities like.
NO, Information is provided like what are the grant under TEQIP and how it can be utilized for the research purpose or education quality improvement.
In my institutes the understanding of TEQIP is like, it help you monetarily to do some activities but I think the good of TEQIP is much more than that.
Allocation of sufficient seed money for infinity research in department is essential for appropriate outcome.
We were facing problem in procurements due to BOG formation was not done recently it has done procurement of equipment are not done till now.
Purchase Methods are not friendly
TEQIP funding to sciences departments by increasing.
Funds allocation is not clear as well as how to split it.
Not full utilization of equipment.
In TEQIP III since there is no provision of advance, so it is very difficult to organize any event because need of advance is required for organizing any event.
10. Any other questions?

- No Internal of things, wireless semen networks, Wireless & Wind computer network machine learning computational intelligence and engg. Areas of AI.
- Can I avoid the facility to work in Dept. electrical engg. IITK for an adequate span time to carry out my research works?
- Can I get assistance to complete my ongoing Ph.D
- Can I get guidance to bring different centrally funded projects to my institute & department?
- Can we send our students to IITK during summer / winter break to have an exposure to the IITK. Environment? If Yes, what is the procedure?
- Can we send our students to IITK to carry out their project works! If Yes, what is the procedure?
- Can we get guidance to organize different National/ international level seminars / workshop/ conference? If yes, what is the procedure?
- Must of the faculties have M.Tech degree in institute, and due to storage of faculty member they are not getting chance for their carrier up graduation. Hence scope may be given to them to do their Ph.D. (part time Ph.D)
- How applied science/ basic sciences stream can participate effective in TEQIP-III rd phase
- What happened to the suggestions/ feedback given in the previous TEQIP supported programs?
- Project related to students should be decided on priority basis. Information about TEQIP should be circulated in advance
- There should be some seed money for the faculty so that he/she may arrange basic facilities for him
- Infrastructure development such as drinking water facility, toilet facility are required to converted
- The rules and regulation for the faculty are not clear
- TEQIP cell is required to be more active
- The culture of research is required to develop. It is totally missing
- There were deviations at least 4-5 from the schedule provided is the designing of the program this should have been avoided.
- Many lectures talks (at least 4-5) as specified is your time table were are not conducted .Many speakers at least 4-5 did not turn up for their talks. It was very disappointing.
- Kindly suggest the state/control government to promote us properly, So that we can also with stand with various IITs.
- Each faculty member should have basic facilities like printer, laptop, paper etc.
- How P.HD students can be associated in TEQIP program?
- The hospitality is really good.
- Do you provide support for P.HD students to work at your Institute?
- TEQIP is assisting the institution/university by way of funding is the fund solely responsible for improvising the quality of education?
- How can a teacher perform his basic duty of teaching and research honesty if he is involve in various other non-academic activities?
- Measure to check the quality improvement in technical education.
- Why a big amount of money is consuming for a single person, who is attending TEQIP program? That amount should be used for interaction both premier institute students of state government college.
- Why the senior faculty members of NIT’s and IIT’s do not go to AICTE approved Government College for same types of interaction? It will help faculty members to modify their teaching styles.
- Has the program schedule prepared as per qualification or teaching area of participants?
- Motivation to faculty
- Is there any provision for young faculty to got financial assistance for him registration fees from TEQIP III.
- Is there any scope for a student to do him B.Tech project at IITS, from TEQIP implemented institution?
- Batch should be small approx 50
- Time table given should be followed
- Why do you organize common program to all streams?
- What policies do you have for reimbursement of money to students for various academic activities under TEQIP or
other then TEQIP if you any criteria, please provide me.

- It there any program for engineering stream, if yes what is the process for taking admission.
- TEQIP should help faculty members to use more resources from other good institutes like IIT and NIT. TEQIP should also initiate faculty exchange program among the institute which are under TEQIP.
- There should be clean cut instruction available on line to all which mention the following points.
- Regular faculties and lab assistant are great problems in our institutes. in addition to that there is no. advance labs in our institutes. TEQIP should take interaction to & all these as early as possible, so that we as well as students of our students of institutes get benefit and they comeback with other best institutes.
- How the students take advantage of TEQIP what are the areas where they can explain & holders the hand of TEQIP.
- Is there any facility for PhD work under TEQIP in state govt. college who are having Master degree?
1. Clarity of communication about workshop

- Excellent: 36%
- Good: 59%
- Ordinary: 5%

2. Organization of the sessions

- Excellent: 36%
- Good: 51%
- Ordinary: 13%
3. Quality of Lectures

4. Effectiveness of discussions
5. **Effectiveness of learning experience**

- Excellent: 34%
- Good: 50%
- Ordinary: 16%

6. **Workshop duration**

- Appropriate: 75%
- Short: 17%
- Long: 8%
7. Would you like to have more such sessions?

- Definitely: 75%
- Maybe: 17%
- No: 8%

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

- Definitely: 93%
- Maybe: 7%
- No: 0%
9. **Suggest Specific topic that you would like additional expert lectures on**

- Organic chemistry related to dyes & Drugs.
- Smart classroom teaching.
- Sustainable development.
- Robotics and artificial intelligence
- Some inter disciplinary topics like wavelets and their application in electrical & communication tech.
- Computer Algorithms software engineering.
- Lab view experiments and fundamental
- Lab view, experiment based presentation
- Non-destructive testing
- Basic electronics. Basic Physics, electro chemical energy storage
- On renewable energy resources
- Mathematical modeling and simulation for engineering problems & use of s/W like COMSOL, FLUENT, FLUIDITY
- Computational fluid dynamic
- Virtual Instrumentation, virtual Labs and topics
- Embedded system, optics designing, VLSI Designing
- Research grants
- Should be relevant to respective branch.
- Power system optimization and soft computing Technique
- Affective computing
- Fault Analysis
- Engineering Mathematics
- Structural Dynamics & artificial Intelligence
- Students transformation toward entrepreneurship
- Core Electronics
- Electrical department specific
- How can teach the students.
- Discussion on UG research
- Latest techniques used in concrete structure
- I would like expert lectures on artificial Intelligence, Database, OS Management Information system compute, network.
- Refrigeration & Air Conditioning
- Practical Session on English Language lab

10. **Additional Suggestions**

- A research workshop organized by TEQIP in the field of chemistry.
- Please suggest me new research topic related to environment sciences
- Please provide us your lab manuals & course work.
- 2 or 3 days workshop was sufficient should be conducted department wise.
- Algorithm, software engg.
- Workshops must be dept. specific.
- There should be separate workshop for department specific learning
- Provide proper accommodation
- Departmental training on effective utilization of TEQIP
- A short term course for application of mathematics in engg.
- Management of time
- Faculties from IIT should visit to the institutes and internet with the students.
- Duration of workshop should be at least 15 days.
- Poster session should be there.
- Should be more lecture
- Avoid formalities
- Some special lectures on technical Communication skills and some lectures on IIT Sectors of current trends.
- Each Institute participate 100% in such type of programme organized at different IIT institutes
- Facilitate National & International conference / Workshops

Teaching

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

![Pie chart showing 80% No and 20% Yes]
2. Do you give class projects for UG classes?

3. Do you give class projects for PG classes?
4. Do you have sufficient resources for laboratory courses?

- Yes: 32%
- No: 68%

5. Is the library/journal/e-connection support adequate?

- Sufficient: 39%
- Inadequate: 61%
6. Would you like to have common (TEQIP) repository of course material?

- Definitely: 64%
- Maybe: 34%
- No: 2%

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

- Definitely: 71%
- Maybe: 28%
- No: 1%
8. Would you like to participate in creation of the repository material (course file/lab Manuals/question bank etc.)?

9. How can IITK effectively help you prepare for teaching?
10. Which Subject do you teach?

- Chemistry
- Theory of machine
- Computer network, software engg. Data structure, mobile computing
- Environmental Sciences
- C, programming, A.I web tech and graph theory
- Machine Design
- Mathematics
- Algorithm, software engg.
- Power electronics, electric drive, electrical machines.
- Electromagnetic field theory electronics
- Non destructive testing
- Fluid Mechanics and Mach. Energy applied thermodynamic
- Physics
- Artificial intelligence
- MP-I,II,CM,OR,MS
- Power system, Electrical Drives network analysis
- Operating system, Data mining
- Power system
- Mathematics, Numerical math Liner Algorithm
- Structural Engineering
- Civil Engineering (Structure analysis)
- Management
- EMFT, Digital Electronics, Communication
- Electrical power system, High voltage Engineering
- Physics
- Chemistry, Environment & Ecology
- Operating system
- Software
- Project management, artificial intelligence
- Digital Logic design
- ERP
- EME
- Mobile Computing
- Web Technology

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

- 27:1
- 1:20
- 1:18
- 30:1
- 20:1
- 28:1
- 1:28
- 1:21
- 20:1
- 1:20
- 1:20
12. How TEQIP can improve your teaching?

- Arrange special lecture in the field of chemistry
- Content
- More faculties are allowed to have higher degree through TEQIP
- May provide interaction facilities with IISCs IITs, or some good foreign institute.
- Smart classes video conferencing
- Conduct research oriented QIP
- Regular workshop by express from IIT & industry
- By assigning local problems to institute
- Through FDPs, STPs etc.
- FDPs, recourses
- Support in lab establish
- By providing expert lecture
- Personal funding for innovative teaching to the faculty
- Provide ground level support.
- By organizing regular workshop on subjects.
- With workshop
- Workshop & conference
- Resource Availability
- By providing Journals etc and basic resources regularly that

13. What problems you face in teaching?

- Providing mentorship in different societies
- Providing e-learning software
- Conducting Workshops
- Organize the workshops
- Definitely
- With the experimental details
- By organizing workshops.
- By organizing seminars regularly
- Sharing lectures notes & previous project topics.
- Providing net connection
- Provide access to e-Journals.
- Through help in upgrading library, e-Library
- E-journal subscription, lab support and Internet facility
- By organizing workshops on specific specialization.
- Providing Regular training.
- By providing platform for higher studies.
- By training time to time.
- By organizing faculty development program.
- Help in pursuing higher studies.
- By making part time PhD more flexible for regular faculties.
- To provide learning and teaching research.
- By training in different IIT’s.
- By training in different IIT’s.
- Financial help.
- E-lecture of IITK classes.
- Work load in very high in our Institution provide more faculty in our Institution.
- Provide more faculty in CSE Department we are base in person.
- By working part time PhD. More flexible for regular faculties.
- By arranging more sessions.
- Provide more faculty in department CSE, Workload is very high.
- Use more mathematical aspect.
- Learn a lot of lecture by senior faculty of IITK in different field of research.
- Lectures provide by faculty very motivated.

Research

1. Would you like to visit an IIT for a short visit/internship/post-doctoral stint, if offered (via TEQIP)?
2. Would you like to share/use research infrastructure at IITK, if made available?

- Definitely: 90%
- Maybe: 10%
- No: 0%

3. Would you like to conduct collaborative research with IITK faculty?

- Definitely: 93%
- Maybe: 7%
- No: 0%
4. Would you like lectures by experts (Indian and International) on niche research areas/ topics?

5. Do you want special-topic conferences?
6. **How can TEQIP help improve your research?**

- By offering the proposal to do make with IIT Kanpur in the field of Environment science, Dyes & polymers.
- Conduction of collaborative research with premier institute so that what is lacking must be compressed by the research guilty premier institute.
- By providing initial setup for research
- By providing us approximate facilities for research work.
- As it allows to attend FDPs from prestigious institutions of the country
- May start a one or two month faculty reallocation program
- To provide financial support for conference journals.
- Through conference journal publication (financial support)
- Providing a research lab in different IITs & IISC.
- TEQIP, we established new lab for research in our institute
- By wandering way of thinking on different topics
- By offering & booking collaborations with eminent professors
- More collaborative research projects should be coined out in which faculty member from technical institution and their students can work jointly with faculty and students of IITs.
- By grants and funds and equipments.
- Provide opportunity for collaborative research with institutes of national importance.
- By providing collaboration research with IIT/NITs.
- E courses workshops etc.
- By providing basic facilities.
- By providing suitable infrastructure
- Provide ground level support.
- By providing access new software.
- By providing more infrastructure. Additional software in labs etc.
- Collaboration different IIT
- By providing funding facilities for workshop conference etc.
- Relevant or productive workshops.
- Conduction of collaboration research with premiere Institute so that what is lacking must be compensated by the research quality of premiere Institute.

7. **Suggestions for national & international workshop at your institute.**

- Arrange a National /International conference in applied science.
- Workshops must be organized more frequently.
- Conduct at least one or two national and international workshop in every year.
- A national workshop for awareness of engg. Students on current problem of India with project creation session may be conducted, but before that accommodation and tranfortation at the institute must be given due consideration.
- On FDP is planed in the electrical engg. Of the college next semester. (odd sem. 2018)
- International workshop on “ Mathematical Modeling and Somukatism analysis for engg. Problems
- Specially arrange the leave in my parent institution so I will to join post doc. For this purpose a teacher (faculty) provide in basic is my position
- National conference on Nanotechnology
- interdisciplinary research
- Power system optimization
- Distributed generation
- Smart grid
- Soft computing techniques
- Robotics
Affective computing
Text mining
Optimization technique
Micro grid
Can be conducted on the various topics
Challenges in business act up
More inclination toward social issue problem solving.
Duration should be appropriate.
Guest should be off reputed institutes.
Such workshop should be organized at institutes.
No Environment yet

8. Any issues you face with TEQIP program at your institute?

- Contribution of Faculty in TEQIP programs should be honored by government.
- TEQIP fund is offered used to procure good required for the college. It should be extensively used for faculty development in academic area.
- Some irrelevant activities are scheduled to utilize the money. Before any activity a proper discussion possible consequences and resources required should be held, which is missing in our institute.
- Become remote location no one to attend conference at college. College monthly focus on procurement not in research.
- Eminent teachers hesitate to come in the institute due to remote location.
- Lack of man power to smooth conduction of the program.
- Policies related to TEQIP are not working properly.
- It adds to much load on faculty
- Lack of resource availability and unequal distribution of the same unplanned expenditure of TEQIP lunch
- Contribution of faculty member in TEQIP III programs should be endorsed/ honored by some amount of many.
- Extra load on teaching facility I would like to request to provide sufficient manpower to run the TEQIP program. Contribution of the faculty member of the institute in TEQIP should be addition to the salary to develop their intent in this area.
- Training for TEQIP activates.
- Not much productive work is done through funding only. Reflective work is shown.
- More active support required.
- Lack of information regarding it.