# A TEQIP workshop on Advanced Robotics
## 15 – 19 March 2016

## Student Feedback

### Workshop

<table>
<thead>
<tr>
<th>Questions</th>
<th>Excellent</th>
<th>Good</th>
<th>Ordinary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarity of communication about workshop</td>
<td>20</td>
<td>03</td>
<td>00</td>
</tr>
<tr>
<td>Organization of the sessions</td>
<td>16</td>
<td>07</td>
<td>00</td>
</tr>
<tr>
<td>Quality of lectures</td>
<td>17</td>
<td>06</td>
<td>00</td>
</tr>
<tr>
<td>Quality of posters</td>
<td>10</td>
<td>13</td>
<td>00</td>
</tr>
<tr>
<td>Effectiveness of discussions</td>
<td>11</td>
<td>11</td>
<td>01</td>
</tr>
<tr>
<td>Effectiveness of learning experience</td>
<td>15</td>
<td>08</td>
<td>00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Appropriate</th>
<th>Short</th>
<th>Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration of workshop</td>
<td>20</td>
<td>01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Definitely</th>
<th>Maybe</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would you like to have more such sessions?</td>
<td>21</td>
<td>01</td>
</tr>
<tr>
<td>Would you like e-lectures by experts on special topics?</td>
<td>22</td>
<td>00</td>
</tr>
</tbody>
</table>

### Suggest specific topic that you would like additional expert lectures on
- Material characterization, computational material science.
- Prosthetics & Orthotics for Human subjects
- SPD of metals & alloys nano science & nano engineering.
- Bond Graph modelling sensors & Actuators. Design & Simulation of Robotics system.
- Mainly related to the microcontrollers programming used in robotics.
- EMB/EEG based control robotics
- Something in computer science
- Severe plastic deformation, friction stir processing
- Parallel Robot.
- Image base recognition system.
- Modelling & control design
- Micromachining
- Mobile robots
- Control of flexible manipulator (position & vibration control by visual serving)
- Mobile robotics

### Additional Suggestions
- Lab sessions could be longer
- Increasing lab sessions.
- Workshop is really very knowledge enhancing and very well organized.
- To the electronics point of view some lectures on embedded systems.
- At least one lab session every day.
### Learning

<table>
<thead>
<tr>
<th>Questions</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you get enough class projects?</td>
<td>20</td>
<td>00</td>
</tr>
<tr>
<td>Is the learning adequate?</td>
<td>21</td>
<td>00</td>
</tr>
<tr>
<td>Do you have sufficient resources for laboratory courses?</td>
<td>15</td>
<td>01</td>
</tr>
</tbody>
</table>

**What is your area of specialization?**
- Machine design.
- Material Science & Engineering.
- Electronics/ Biomedical Engg.
- Material Science
- Automations & Ind. Robotics.
- Quantum, Nanotech.
- EMB based rehabilitation robotics.
- Robotics & AI, ES
- Computer science.
- Parallel manipulator
- Vision/image processing
- Instrumentation
- Robotics
- Computer vision/visual serving.
- Bond Graph Modelling, Mobile Robotics.
- Manufacturing Science & Technology.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Sufficient</th>
<th>inadequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the library/journal support/e-connection adequate?</td>
<td>15</td>
<td>01</td>
</tr>
<tr>
<td>Would you like to have common (TEQIP) repository of course material?</td>
<td>20</td>
<td>01</td>
</tr>
<tr>
<td>Would you like to visit IITK to attend specialized courses?</td>
<td>23</td>
<td>00</td>
</tr>
<tr>
<td>Would you like MOOCS/e-resources based courses?</td>
<td>13</td>
<td>05</td>
</tr>
</tbody>
</table>

**How can TEQIP help improve your learning?**
- By performing such courses in future for quality education and configuration of such esteemed workshop in the field of Robotics.
- Providing these type of lecture & more lab sessions.
- By improving more of lab sessions.
- It can arrange various workshops on different topics like this.
- The learning can be enhanced if a provision is made to invite individual expert along with lectures by research.
- By workshop video lectures
- By having such type of workshops
- By allowing us to attend more & more events & by asking to generate similar work.
- By organizing a workshop we get exposure.
- Providing adequate fund to NITs.
- What’s the going on in TEQIP, inform us frequently.
<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Definitely</th>
<th>Maybe</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would you like to visit an IIT for a short visit/internship/post-doctoral stint, if offered (via TEQIP)?</td>
<td>22</td>
<td>01</td>
<td>00</td>
</tr>
<tr>
<td>Would you like to share/use research infrastructure at IITK, if made available?</td>
<td>21</td>
<td>02</td>
<td>00</td>
</tr>
<tr>
<td>Would you like to conduct collaborative research with IITK faculty?</td>
<td>22</td>
<td>01</td>
<td>00</td>
</tr>
<tr>
<td>Would you like lectures by experts (Indian and international) on niche research areas/topics?</td>
<td>22</td>
<td>01</td>
<td>00</td>
</tr>
<tr>
<td>Do you want special-topic conferences?</td>
<td>22</td>
<td>01</td>
<td>00</td>
</tr>
</tbody>
</table>

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

- By performing such events across the nation and in every institute.
- Conducting these types of sessions at out institute (NIT’s) too.
- Conducting similar workshops in different fields of research.
- TEQIP can provide the various specialized faculties to students to conduct specific research.
- More than the workshop certain technical programmes may be organized like to be posted as technical assistants that may benefit building the practical part.
- Through TEQIP many talks of expert persons have been arranged so definitely, it’s helpful.
- Attending this kind of workshop enhanced our research.
- By conducting workshops & seminar like these, it would definitely help me in my research.
- By providing not only facility, but providing experience of the others who are in same field for a long time.
- By providing us knowledge through conducting workshop and seminars.
- By offering students with various courses.
- By organizing advanced level workshop on specific topic (related to robotics).
- Providing more fund to NITs.
- It should be transparent to anyone.
Additional Questions for TEQIP 3^{rd} Phase:

1. Would you want in the 3^{rd} phase of TEQIP paid access to high end experimental facilities in specific institution?
   - Yes: 06
   - Maybe: 02

2. Would you be interested in having end state art of activity TEM, SHRTM etc at specific institution (in the TEQIP fold so that all TEQIP institution can access) ?
   - Yes: 06
   - Maybe: 01