



# TEQIP Workshop on Electromagnetic Theory

## 1–5 May 2015



### Summarized Feedback

Total Attendance: 19

#### Workshop

<i>Questions</i>	<i>Excellent</i>	<i>Good</i>	<i>Ordinary</i>
Clarity of communication about workshop	12	06	00
Organization of the sessions	15	03	00
Quality of lectures	14	04	00
Quality of posters	Na	Na	Na
Effectiveness of discussions	11	07	00
Effectiveness of learning experience	06	12	00
	<i>Appropriate</i>	<i>Short</i>	<i>long</i>
Duration of workshop	16	02	00
	<i>Definitely</i>	<i>Maybe</i>	<i>No</i>
Would you like to have more such sessions?	14	03	01
Would you like e-lectures by experts on special topics?	17	01	00
Suggest specific topic that you would like additional expert lectures on	<ul style="list-style-type: none"> <li>• Transmission line and problems based on smith chart.</li> <li>• Transmission lines</li> <li>• Antenna &amp; Wave Propagation.</li> <li>• E-lectures based on transmission lines and waveguides.</li> <li>• Application of EMT</li> <li>• Semiconductor Memories</li> <li>• VLSI</li> <li>• Analog Circuit Design.</li> <li>• OPTSIM</li> <li>• Python Nuclear Physics.</li> <li>• DSP and DIP, Signals &amp; Systems</li> <li>• Quantum Mechanics</li> <li>• Microwave</li> <li>• Quantum Mechanics and its applications.</li> <li>• Lasers</li> </ul>		
Additional Suggestions	<ul style="list-style-type: none"> <li>• More no. of teachers should be there, each session by a different teacher should be delivered. So that we get chance to interact more no of experts.</li> <li>• Duration of table top experiment (Dr. H.C Verma ) should be longer.</li> <li>• Focus should be more on table top experiment.</li> <li>• Beside of concluding subjects emphasize on topics more display.</li> <li>• Lectures of H.C Verma sir were really motivating. I guess if we could have few more sessions with him would have been great.</li> </ul>		

	<ul style="list-style-type: none"> <li>Few more table –top experiments along with theory class would have been more effective focus to do something for students.</li> </ul>
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## Teaching

Which subjects do you teach?	<ul style="list-style-type: none"> <li>Electronics and Communication</li> <li>Microwave, Analog Communication, Electromagnetic Theory</li> <li>DSP, Radar &amp; Sonar, Signals and Systems.</li> <li>N/K theory, Communication System.</li> <li>Electromagnetic Theory.</li> <li>Antenna, Microwave, EMT</li> <li>Microelectronics, Analog Electronics</li> <li>Basic Electronics, Microprocessor, EMT</li> <li>Optical Communication</li> <li>Engineering Physics and EMT</li> <li>Signals and systems, DSP</li> <li>Quantum Mechanics</li> <li>EM Theory, Antenna &amp; wave propagation , Optical Fibre Communication, Wireless Communication.</li> <li>Statistical Mechanics.</li> <li>Control Engg</li> <li>Applied Physics, Materials Science</li> </ul>		
What is average student to teacher ratio in your institute?	<ul style="list-style-type: none"> <li>40:01</li> <li>40:01</li> <li>12:01</li> <li>40:01</li> <li>18:01</li> <li>25:01</li> <li>60:01</li> <li>40:01</li> <li>30:01</li> <li>18:01</li> <li>20:01</li> <li>20:01</li> <li>15:01</li> <li>20:01</li> </ul>		
<b>Questions</b>	<b>YES</b>	<b>NO</b>	
Do you have additional support for teaching ( tutors, graders, teaching Assistants, etc)?	07	11	
Do you give class projects for UG classes?	11	07	
Do you give class projects for PG classes?	07	07	
Do you have sufficient resources for laboratory courses?	10	08	
	<b>Sufficient</b>	<b>Inadequate</b>	
Is the library/journal/e-connection support adequate?	06	12	
	<b>Definitely</b>	<b>May be</b>	<b>No</b>

Would you like to have common (TEQIP) repository of course material?	16	02	00
Would you like to visit IITK to participate in and develop course material (existing or new)	13	05	00
Would you like to participate in creation of the repository material (course files/lab. Manuals/question bank/etc)	11	07	00
	<i>e-courses</i>	<i>Workshops</i>	<i>Content</i>
How can IITK effectively help you prepare for teaching?	16	18	06
How can TEQIP help improve your teaching?	<ul style="list-style-type: none"> <li>• Gives exposure to senior professors lectures on important courses.</li> <li>• The quality of teaching can be improved by supporting the class project of UG and PG classes both.</li> <li>• Such workshop gives me a lot of details knowledge about the topics and the table top experiments show by Dr. H.C Verma is really motivated me to do something for my students. I want to participate every time such type of workshop for better teaching.</li> <li>• By conducting knowledge foundation workshop by TEQIP.</li> <li>• Forming teaching group in different domain and share.</li> <li>• Knowledge by any communication want to attain TEQIP conducted workshop on periodic basis.</li> <li>• By conducting similar workshops on basic topics and if possible by making an active e-group where we can discuss basic physics problems with the master minds.</li> <li>• Frequent visit by professor of IITK to our institution to know exactly where we lack and how can these problems be solved in one of the way things can be improved.</li> <li>• With providing faculty for these kind of workshops on special topics and experimental facilities provided by TEQIP.</li> <li>• Table top experiment shown in workshop are effective and economical to present in front of class. It improves teaching and basics of students.</li> <li>• Very quality learning through subject experts and great presentation of the subject. Table top experiment and other study material helped in knowledge increment.</li> <li>• It helps by providing the chances to attend various workshops short term courses faculty development programs etc.</li> <li>• Different expert lecture will be helpful to improve our teaching quality. We interact to the experienced faculty member and they share their experience and it will be helpful to younger faculty.</li> </ul>		

	<ul style="list-style-type: none"> <li>• Subject specific training.</li> <li>• Workshops and video lectures.</li> <li>• It increases our knowledge base, we learn new methods of effective teaching. A global platform exposure. It is highly beneficial.</li> <li>• If by the help of TEQIP I come to know about the teaching learning processes used in IIT's as well as more visits in labs of IITK would help me to improve by teaching.</li> <li>• Organizing many workshops and guest lectures on the complex typical topics.</li> <li>• Video lectures, workshops, lab experiments, lab sharing, course material.</li> </ul>
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## Research

<i>Questions</i>	<i>Definitely</i>	<i>Maybe</i>	<i>No</i>
Would you like to visit an IIT for a visiting-faculty/post-doctoral fellow, if offered (viaTEQIP)?	15	03	00
Would you like to share/use research infrastructure at IITK, if made available?	18	00	00
Would you like to conduct collaborative research with IITK?	18	00	00
Would you like lectures by experts (Indian and international) on niche research areas/topics?	18	00	00
Do you want special-topic conferences?	15	03	00

<p>How can TEQIP help improve your research?</p>	<ul style="list-style-type: none"> <li>• Collaborative research facilitation will defining help developing R &amp; D in our institution.</li> <li>• During workshop, I can interact with the professor and faculty members of different colleges, that helps me motivated me to do some new projects.</li> <li>• Workshop conducted by TEQIP for advanced level simulation for different domain.</li> <li>• Want to attend the workshop for interaction with other faculties and share research ideas.</li> <li>• If this workshop happens every year and if we get the opportunity to come back here then by interacting with the faculties, we can reopen our research projects.</li> <li>• There are certain schemes in TEQIP wherein the heads from the various engg colleges are encourage to do research in IITK only the requirement is to implement such schemes literally from both the sides.</li> <li>• By providing many option to attend various research activities and to interact and collaborate with leading scientists of the field.</li> <li>• Some basics which we skip are reminded here again. This quick revision will give an appropriate term to research.</li> <li>• Very deep knowledge person meet in this workshop. The research work guidance by them will definitely improve my research work and teaching method.</li> <li>• Still has to find out but it should help anyone to establish the lab or other if one interested directly and monitor it in a proper way.</li> <li>• Technical papers presentation/ publishing.</li> <li>• Lab set ups.</li> </ul>
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	<ul style="list-style-type: none"> <li>• Workshop.</li> <li>• Workshops and video lectures.</li> <li>• By providing opportunity to share the lab and other resources, which are not easily available at regional colleges.</li> <li>• By organizing workshops in my research area. My research area is DSP. More focussed on filter designing. If I get to interact with students and faculty who are doing their research in signal processing, would be helpful.</li> <li>• By organizing workshops in many research area. My research area is DSP. It will be helpful to me if TEQIP organize workshop related to this area.</li> <li>• Video lectures, workshops laboratory facility made available, course material.</li> </ul>
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Additional Comments

- Although all the lectures were very beautiful, but I have a feeling that if they could spend more time on explaining basic aspects rather than deriving formulas that are in books. Also in that case before the workshop if you inform the specific topics going to be covered, we can look at those derivations and then come here to enrich our visions on those topics.
- Do not assume, person sitting in workshop knows everything. Don't just concentrate on concluding a whole subject within 3-4 lectures rather emphasis on topics of person sitting in. It would be a great help. Special thanks to Prof. H.C Verma and salute to the thought of arranging this workshop.
- Very warn experience and wonderful hospitality by TEQIP staff. Very good arrangement of stay and delicious food by them. I should not forget to mention Mr. Sagar and Mrs. Shirolly Anand for such a wonderful and learning arrangement for all of us. So much of knowledgeable person under one roof is a very rare and fantastic experience. Will look forward to have more such sessions. Please organize some workshop of core electronics and communication or software workshop. Very thankful to TEQIP staff and co-ordinators for providing such a wonderful and learning experience.

