



Mechanics School at IIT Kanpur

20 - 24 February 2015



Summarized Faculty Feedback

WORKSHOP SESSION

Questions	Excellent	Good	Ordinary
Clarity of communication about	16	06	01
Organization of the sessions	20	03	00
Quality of lectures	15	08	00
Effectiveness of discussions	13	10	00
Effectiveness of learning experience	11	10	00
	Appropriate	Short	long
Duration of workshops	21	01	01
	Definitely	Maybe	No
Would you like to have more such sessions?	19	03	01
Would you like e-lectures by experts on special topics?	20	03	00

Suggest specific topic that you would like additional expert lectures on

- More lectures must be delivered about realistic problems.
- Computational methods and Functional analysis.
- Turbulent shear flow, Buoyancy in fluids, Advanced CFD
- Rheology, Fluid statics.
- Teaching methodologies for technical education.
- Fracture, measurements.
- Kinematics, Dynamics, Quality Control
- Introduction to Rotor Dynamics
- Plasticity using large deformation theory and other material models.
- Dynamics , Solid Mechancis
- Analytical dynamics, Control of Dynamic Systems, Non-linear vibration, Mechanics of stochastic systems, Dynamics of Electro dynamical systems etc.
- It could be covered in more detailed with real life problems
- A complete course with practical should be conducted like design of machine, vibrations with problems, mechanics of solid.
- Lectures on fluid power
- Bio-Mechanics
- Non-Linearity.
- Instability
- Chaos
- Non Newtonian Flow
- Non-Linear Mechanics.
- Experimental lab demonstration on various subjects like FM, heat transfer.
- CFD
- Molecular Simulation Modelling.

Additional Suggestions

- Engg mechanics, Fluid Machinery.
- Short term course on experimental basis.
- Based on the feedback of the industries topics of discussion to be decided. Focus should be on the topics which can help the students of average category getting the placement offer B.tech/M.tech
- There could be a follow up workshop which takes it from here like a season-2 of the lecture series.
- Would be more effective if projector is used in the place of board.
- Some lectures were excellent some were good and some ordinary, so I have marked as an average good.
- Lectures notes/ reading materials could have been matter.
- Organize such workshop on experimental fluid mechanics
- Keep it on to enhance technical knowledge.
- Some courses should be introduced specially on software training and their use.
- Please conduct these session during summer or winter vacation.
- Software training.

TEACHING

<p>Which subjects do you teach?</p>	<ul style="list-style-type: none"> • Fluid Mechanics. • Thermodynamics, Energy Conversion and Engineering Mechancis. • Fluid Mechanics, Numerical Methods Chemical Engg. Design. • Mechanics , Thermodynamics, metrology , measurement, material handling • Machine design and applications, Machine drawing both manual and auto Cad. • Manufacturing Science, Kinematics, Machine Drawing • Finite Element Method Engineering Mechancis Theory of Plasticity. • Fracture Mechanics, Vibrations • Engineering Mechanics, Dynamics, Rotor Dynamics • Machine Design, Fluid Machinery, Robotic Engg. • Thermodynamics, I.C Engines, Gas Turbine, Thermal Power Engineering. • Machine Design, Graphics and Drawing. • Solid Mechanics, Concrete Structure. • Heat transfer • Fluid Mechanics and Thermodynamics. • ATP • Transport Phenomena • Engineering Statics. • Mass Transfer, Thermodynamics
<p>What is average student to teacher ratio in your institute?</p>	<ul style="list-style-type: none"> • 10:01 • 16:01 • 22:01 • 14:01 • 75:01 • 10:01 • 10:01 • 50:01 • 30:01 • 14:01 • 20:01 • 20:01 • 20:01 • 20:01 • 12:01

Questions	YES		NO	
Do you have additional support for teaching (tutors, graders, teaching Assistants, etc)?	05		16	
Do you give class projects for UG classes?	17		04	
Do you give class projects for PG classes?	15		05	
Do you have sufficient resources for laboratory courses?	08		13	
	Sufficient		Inadequate	
Is the library/journal/e-connection Support adequate?	08		12	
	Definitely	May be	No	
Would you like to have common (TEQIP) repository of course material ?	16	05	00	
Would you like to visit IITK to participate in and develop course material (existing or new)	14	07	00	
Would you like to participate in creation of the repository material (course files/lab. Manuals/question bank/etc)	13	08	00	
	e-courses	Workshops	Content	none
How can IITK effectively help you prepare for teaching?	15	15	04	00

How can TEQIP help improve your teaching?

- TEQIP provides platform enhancing the vision for improving research and teaching aids.
- Sharing teaching experiences.
- Some of the speakers are really good which not only review the topics but also polished the teaching skills through good discussions. This helps a lot in development of teaching aid.
- Conducting more workshops in various areas of chemical engg.
- E-course, workshops, training.
- Have a brush up of the basics.
- Indepth learning of certain topics.
- Improve pedagogical skills
- By giving opportunity to attend above type of classes also in the field of manufacturing Science, Kinematics, thermodynamics etc.
- By giving opportunity to visit various labs concerned with the subjects as IITK or any other IIT's of our country.
- By giving opportunity of more interaction with the lab staff of IIT.
- In a year at least twice above type of schools would benefit better in teaching.
- By organizing such workshops for longer duration during summer vacation.
- It help us in how to deliver lecture in the class.
- It will help me in organizing the lecture units, including new topics.
- The courses to be conducted in a manner in which the application of theory should be covered with various examples, More structured courses materials etc.
- Organizing such workshop, Faculty development program.
- By giving or familiarisation with current research or giving deep knowledge (Technical).
- By organizing such training school and by providing lecture notes on different subjects.
- Different Resources.
- With these short term courses and interactions with subject experts faculty can improve a lot and will be beneficial.
- Conduction of different modes of teaching classes.
- Improving our knowledge by having specific workshops or faculty development programmes.
- By involving in short term research with faculty of IIT.