To
The Executive Secretary
Indian Society for Technical Education
Shaheed Jeet Singh Marg, Near Katwaria Sarai,
Opp. Sanskrit Vidyapeeth, New Delhi - 110 016

Dear Sir/Madam

Subject: Request for approval of three workshops.

Ours is Maharshi Parshuram College of Engineering, Velneshwar located in the Konkan region of Maharashtra. Our ISTE institute membership code is **IM 2360**. With your approval and support, we successfully conducted the workshop on "Multidisciplinary Engineering Trends" in the month of July 2014.

Considering the overwhelming response by the students, now we have planned three different workshops in the month of January 2015. The details are given below:

Sr. No.	Title of the Workshop	Planned for	Planned Date
01.	Use of Akash – II tablet in	First Year Engineering students	12/01/2015 &
	education		13/01/2015
02.	Mechatronics – I	Second Year Engineering students	12/01/2015 &
		Second fear Engineering students	13/01/2015
03.	Mechatronics – II	Third Voor Engineering students	12/01/2015 &
		Third Year Engineering students	13/01/2015

The details about objective of the workshop and its contents are enclosed. Herewith, we request you to approve these three workshops. We welcome your suggestions regarding improvements in these workshops.

V	/ait ino	for	approval	letter

Thank you.

Yours truly

Dr. Shilpa Kamat In-charge Principal

Encl: Details about the three workshops.

<u>Use of Akash – II tablet in education</u>

Aakash tablet was launched in India by MHRD for educational use. In near future, Government of India plans to deploy Millions of these tablets amongst students, to enhance the effectiveness of their learning.

Aakash is now available in an enhanced version (Aakash-2) of the original tablet. It has a 1 GHz processor, 512 MB memory, 4GB portioned NAND flash, a capacitive touch screen. It runs the Android 4.0 Operating System. Future versions of the tablet will continue to have further enhancements. Under the National Mission on Education through Information and Communication Technologies (NME-ICT), IIT Bombay is conducting a project for empowerment of teachers using these tablets. Apart from the standard applications available on Android, several important educational applications and contents have been added by IIT Bombay. These are being distributed in Open Source.

Objective:

Give training to the students about the use and applications of Akash –II tablet.

For whom:

First year engineering students of all branches.

Contents:

- 1. Basic use of Akash II tablet.
- 2. To learn Kingsoft-office application.
- 3. To learn interface device like Pen drive, PC, Camera with Akash II.
- 4. To learn C, C++ programming using APL application.
- 5. To learn click application.
- 6. To content TV, Projector etc. with Akash II using PTV tool.

Expected Outcomes:

- 1. Use of Akash-II instead of computer is one of the cost benefit solution.
- 2. Preparation of tablet base projects.

Mechatronics – I

Horizons of knowledge are expanding and only those Nations, which can master and command these emerging new technologies, can survive the market economy. India is an emerging marketing and engineering education is going to be an engine of growth to Indian economy with ability to generate more employment. Today we have more than 2,500 Engineering Colleges with an output of more than 700,000 students every year. However, The Industry Readiness Index survey 2013 indicates that only 10 per cent students are industry ready. If this picture is to be changed then we need to enrich our engineering education with new interdisciplinary technologies incorporated in the teaching pedagogy.

Contents:

- 1. Solar operated digital alarm clock.
- 2. Solar operated bird bell.
- 3. Solar operated 12 tune bell all time.
- 4. Water tank level controller.
- 5. All time welcome display.
- 6. Flashing light LED ornaments star effect.
- 7. Flashing light LED ornaments circle effect.
- 8. Flashing light LED ornaments spiral effect.
- 9. Flashing light LED ornaments square effect.
- 10. Catch burglar all time.
- 11. Clap Clap switch.
- 12. Precision 2 range 555 timer.
- 13. Listening bug.
- 14. Light dimmer for portable applications.
- 15.IC 723 as voltage regulator.
- 16. Generating ideal power supply.
- 17. Quiz master.
- 18. Infrared light beam alarm.
- 19. Ultrasonic movement detector realy.
- 20. Timer with audible warming.
- 21. Time switch

Mechatronics – II

Horizons of knowledge are expanding and only those Nations, which can master and command these emerging new technologies, can survive the market economy. India is an emerging marketing and engineering education is going to be an engine of growth to Indian economy with ability to generate more employment. Today we have more than 2,500 Engineering Colleges with an output of more than 700,000 students every year. However, The Industry Readiness Index survey 2013 indicates that only 10 per cent students are industry ready. If this picture is to be changed then we need to enrich our engineering education with new interdisciplinary technologies incorporated in the teaching pedagogy.

For 3rd year engineering students will cover the hand on assembly and testing practical's using "Akash – II" I pad as display an monitoring device the use of solar energy to support these Akash – II system is also part of this particular workshop.

Contents:

Following Assembly and Testing Practical's are planned using Akash – II as Display Device.

- 1. Pressure Measurement.
- 2. Flow.
- 3. Temperature.
- 4. Body Temperature.
- 5. Blood Pressure Monitoring.
- 6. Vibration Detection and Measurement.
- 7. Water Tank Level Controller.
- 8. Human Interface and Bio Signals.
- 9. Force.
- 10. Distance.
- 11.DVM.