



**MADANAPALLE INSTITUTE OF
TECHNOLOGY & SCIENCE
(UGC-AUTONOMOUS)**

Affiliated to JNTUA, Anantapur & Approved by AICTE, New Delhi
Recognised Research Center
Accredited by NBA for CSE, ECE, EEE & ME
World Bank funded Institute
Recognised by UGC under the sections 2(f) and 12(B) of the UGC act 1956
Recognised as Scientific & Industrial Research Organization by DSIR of DST

Department of Physics

Date: 07-05-2018

Members of the Board of Studies for the Academic Year 2018-19

S.No.	Name of the member	Composition as per the UGC-Autonomous guidelines	Designation & Address
1.	Dr. Virendra Kumar Verma	Head of the Department concerned (Chairman)	Sr. Assistant Professor & Head, Department of Physics, MITS
2.	Dr. N.Nanda Kumar Reddy	Subject Expert - Engineering Physics	Assistant Professor, Department of Physics MITS
	Dr. V. Mahendran	Subject Expert - Modern Physics	Assistant Professor, Department of Physics MITS
	Dr. K. Hari Krishna	Subject Expert - Physics: Electromagnetic Theory	Assistant Professor, Department of Physics MITS
	Dr. S. Victor Vedanayakam	Subject Expert - Optical Physics & its Applications	Assistant Professor, Department of Physics MITS
	Dr. Sunku Sreedhar	Subject Expert - Laser Physics & Advanced Laser Technology	Assistant Professor, Department of Physics MITS
	Dr. B. Jagadeesh Babu	Subject Expert - Thin Film Technology & its Application	Assistant Professor, Department of Physics MITS
3.	Dr. R. Padma Suvarna	Expert in subject nominated by Academic Council	Professor & Head, Department of Physics, JNTUA College of Engineering, Anantapur 9441079332
	Dr. Ariful Rahaman	Expert in subject nominated by Academic Council	Associate Professor, VIT University, Vellore 632014, Tamil Nadu 9698439988
4.	Dr. Y. Nazeer Ahammed	One expert to be nominated by the Vice-Chancellor from a panel of six recommended by the college Principal	Associate Professor, Department of Physics, Yogi Vemana University Kadapa. 9491944454
5.	Mr. M. Ravi Sankar	Representation from Industry/Corporation Sector	DIO/Scientist D National Informatics Center, Ministry of Electronics & Information Technology, Govt. of India Chickballapur, Karnataka 9538802663

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Dr. Virendra Kumar Verma
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**DEPARTMENT OF PHYSICS
Board of Studies Meeting
Minutes of Meeting**

Date: 30.06.2018

The third meeting of Board of Studies is held today on 30.06.2018 from 10:30 AM - 03:30 PM for the approval of the syllabi of Physics courses offered by Department of Physics, MITS.

The following members attended the meeting.

Members Present:

SI. No.	Name	Position on BoS
1.	Dr. Virendra Kumar Verma	Chairman
2.	Dr. Y. Nazeer Ahammed	University Nominee
3.	Dr. R. Padma Suvarna	Subject Expert
4.	Dr. Ariful Rahaman	Subject Expert
5.	Mr. M. Ravi Sankar	Industry Expert
6.	Dr. S. Victor Vedanayakam	Member
7.	Dr. Hari Krishna Koduru	Member
8.	Dr. B. Jagadeesh Babu	Member
9.	Dr. N. Nanda Kumar Reddy	Member
10.	Dr. Sunku Sreedhar	Member
11.	Dr. V. Mahendran	Member

HoD of Physics, Dr. Virendra Kumar Verma explained in detail regarding the syllabus of Physics and Open electives for B. Tech. Programme to be offered in new regulation R18 from the academic year 2018-2019.

Board members reviewed the following syllabi

1. 18PHY101 Engineering Physics
2. 18PHY102 Modern Physics
3. 18PHY103 Physics: Electromagnetic Theory
4. 18PHY201 Physics Laboratory
5. 18PHY301 Optical Physics and its Applications
6. 18PHY302 Laser Physics & Advanced Laser Technology
7. 18PHY303 Thin Film Technology and Its Applications

Resolutions:

1. BOS committee suggested to prepare separate syllabus for all Engineering branches and recommended to conduct compulsory practical relevant to their opted branch.
2. The board suggested to exclude the topics conservative and non-conservative principles in Unit -I, impulse in Unit - II, Resolving power in Units - IV and Dye laser in Unit - V, of Engineering Physics course
3. The board suggested including colours in thin films to stress the application of interference in Unit - IV, of Engineering Physics course.
4. BOS committee suggested to restrict postulates of Quantum mechanics and excluded the topic linear harmonic oscillator in Unit - III of Modern Physics course.

5. BOS committee suggested to explain Kronig-Penny model in qualitatively and agreed to exclude the topics on carrier concentration, carrier transport, diffusion and drift in Unit – IV of Modern Physics. In addition, they recommended to include a text book on Quantum Mechanics written by Arul Das.

6. BOS suggested registering in National Knowledge Network – which facilitates to attend for virtual classes delivered by senior academicians from premier Institutions.

7. The board suggested excluding “Ferromagnetism”, in Unit –IV of Electromagnetic Theory course.

8. According to the suggestions of the BOS members, we included experiments Planck’s constant, B-H curve, Helmholtz coil, e/m determination, Wheatstone bridge experiment, determination of particle size using laser and torsional pendulum in Physics Laboratory Course.

9. The board suggested changing the title as Fibre Optics instead of Optical Fibres in Unit –V, Optical Physics and Applications.

10. The board recommended excluding the topics in following mentioned units of Laser Physics and Advanced Laser Technology.

Unit-I: Two level systems and multi-level systems, Gaussian beam and its properties.

Unit –II: Copper vapour laser, Nitrogen laser, Excimer laser.

Unit –III: Ruby laser.

Unit-IV: Liquid dye saturable absorbers, dispersion and compensation and characterization of Femtosecond pulses.

11. Board suggested to restrict to introduction for the topics Ti-Sapphire and quantum dot lasers. Pulsed operation topics shifted from unit III to unit IV.

12. The board recommended the following changes in Thin Film Technology course.

Unit -I: Crystal structure is modified as crystal defects.

Unit-II: Thermal, microwave, ion beam, polymerization deposition techniques are excluded.

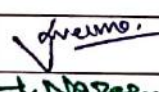
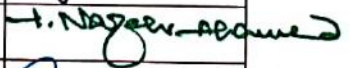
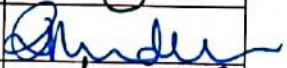
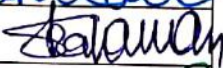
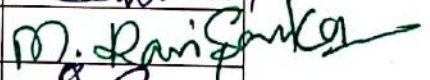

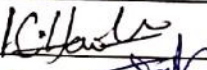

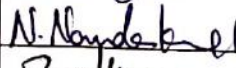


Unit -III: Thermal properties of thin films are included in Unit - III.

Unit -IV: Porous measurements are excluded.

Unit -V: Ferro electric effect is replaced by thin film transistor.

It is resolved that the present syllabi brought before the BoS is thoroughly discussed and can be adopted with the suggested modifications.

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9.	Dr. N. Nanda Kumar Reddy	Member	
10.	Dr. Sunku Sreedhar	Member	
11.	Dr. V. Mahendran	Member	


Head

Department of Physics
Head of the Department
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