BMS INSTITUTE OF TECHNOLOGY & MANAGEMENT
(Autonomous Under VTU)

DEPARTMENT OF PHYSICS

OPEN COURSE 2020-2021 (ODD)

June 1-5, 2021

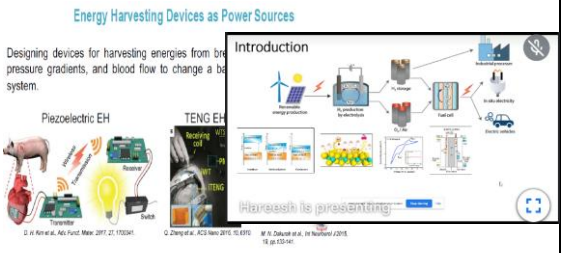
Date: 5-06-2021

Department: Physics		
Title of the Open Course		**Materials for Devices: An introduction to Engineering Startups**
Targeted Students from Branches		4^{th} and 6^{th} SEM All branch engineering students, research scholars and research staffs
Registration Fee		Rs.100
No. of students attended		8
Software/Hardware Tools used		Google Meet
Delivery Methods (e.g.: ppt presentation, chalk & talk, simulation, videos, project, etc.)		PPT Presentation and Youtube videos
Assessment Methods (e.g.: Quiz, test, mini-project, report submission, etc.)		MCQ G-form written Quizzes conducted and evaluated for the sessions
Open Course Chief Coordinator Details (One Point Contact)	Name	Dr. C. Kavitha, Dr. Dhananjaya.N
	Mobile No.	+919008303399, +919036840280
	Email ID	gkavitha21@bmsit.in, ndhananjayas@bmsit.in
Internal Resource Person Details (Please use additional rows for multiple resource persons)	Name	Dr. Daruka Prasad B
	Designation	Assistant Professor, Department of Physics, BMSIT&M
	Mobile No.	+91-9535100437
	Topics	Research Methods to do good research and 4th Generation Solar Cells
	Name	Mrs. Ashwini K R
	Designation	Assistant Professor, Department of Physics, BMSIT&M
	Mobile No.	9844529596
	Topics	Nanophosphors for WLED Applications

	Name	Dr. Jyoti C Abbar
	Designation	Assistant Professor, Chemistry dept, BMSIT&M
	Mobile Number	+918123500885
	Names	Dr C.Kavitha, Dr.Dhananjaya.N, Dr.Lokesh, Dr.Basavaraj. R.BDept of Physics, BMSIT&M, Bangalore
External Resource Person Details (Please use additional	**Name**	**Dr. Naveen**
	Designation	Assistant Professor
	Company/Organization	Presidency University, Bangalore
	Mobile Number/email-id	9945508611
	Topic	ZnO nanomaterials for chemiresistive gas sensors
	Name	**Dr. Hareesh K**
	Designation	Assistant Professor
	Company/Organization	School of applied sciences, Reva University
	Mobile Number/email-id	9986996834
	Topic	Supercapacitors: Design, Fabrication and Application
	Name	**Dr.Udhaya Banu**
	Designation	Assistant Professor
	Company/Organization	Centre for Research and Innovations. Adichunchanagiri University, Mandya
	Mobile Number/email-id	8867492598
	Topic	Doped and composite materials for Hydrogen production and Lithium ion battery
	Name	**Dr. Prem Sai,**
	Designation	Research scholar
	Company/Organization	IIT-Bombay
	Mobile Number/email-id	premsaii@gmail.com
	Name	**Dr. Nagaraju G**
	Designation	Assistant Professor

	Company/Organization	SIT, Tumkur
	Mobile Number/email-id	9620157141
	Topic	Synthesis of novel electrode material for lithium ion batteries
Curriculum Gaps: (Please indicate the gaps in terms of POs/PSOs)	We have covered the following POs through the open course PO5: Modern Tool Usage PO6:The Engineer and Society PO7:Environment and Sustainability	
Abstract (Brief Details of the open course with less than 250 words)	Smart Materials plays a vital role in making devices such as flexible electrnonic devices, Medical devices, Nano devices, sensors, energy storage devices and water purification devices etc., to make human life simple. This open course aims in familiarizing the participants with various device making materials, which can lead to engineers to setup startup company with the products made with these smart materials. **Students of all engineering branches and aspirants who wish to take multi-disciplinary fields are most welcome to join this course.** **Topic to be covered:** ➢ **Commerical Graphene Products: Introduction and market status** ➢ **4th Generation Solar Cell devices for the future Energy Needs** ❖ **Research Methods & Methodologies for doing good research** ➢ **Multifunctional Nanomaterials for Light Emitting Diode devices** ➢ **Super conducting Devices** ➢ **Physics of Nano materials fundamentals to Device level** ➢ **Sensor Device materials** ➢ **Liquid Crystal Display Devices** ➢ **Super capacitor, Water filter and Medical Devices.**	

Add best(high resolution), Four photograph of the event:



Open Course Outcomes Of "***Material for devices: An introduction to Engineering Startups***"	**CO-1**	**Able to understand advanced / smart materials synthesis**
	CO-2	**Able to apply characterization techniques**
	CO-3	**Able to fabricate the devices**
	CO-4	**Able to analyze the materials/devices for industrials applications**

CO-PO Mapping for open course of "Materials for Devices: An introduction to Engineering Startups"

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO3
CO 1	3	3	3	3									
CO 2					3								
CO 3			3	3		3							
CO 4						3	3						

Feedback from external expert:

1.mhowladar –startup expert told that our startup open course is a good choice

Feedback (critical) from students:

1. students told that the course is very new, interesting and informative.

Feedback from External participants (if any):

1. students told that the course is very new, interesting and informative.

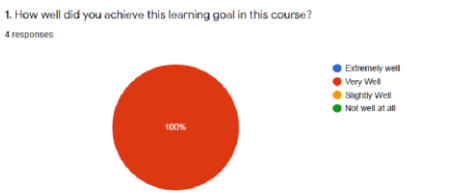
Corrective methods/suggestions to consider while conducting open course next time (at least two points)

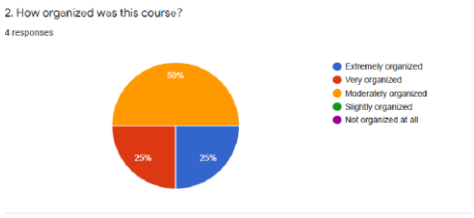
1. If it is offline, the interaction will be more effective.

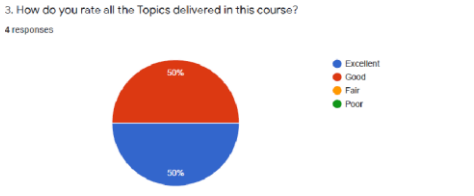
2. The hands on training in the research lab would have been given more effectively to students

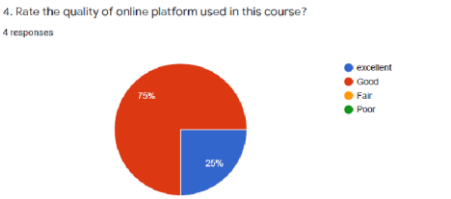
Sample course feedbackform

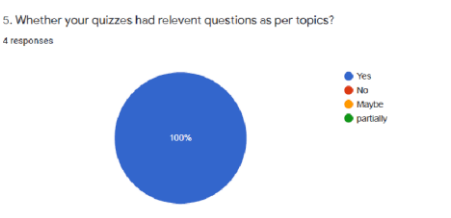
(Attach filled feedback form in bmp/png.jpg format, submitted by a participant)











Dr. C. Kavitha and Dr. Dhananjaya.N
Signature of the (dept)Open-Coordinator

Dr. R. Lokesh

Head of the Department