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Name of the School: Engineering

Name of the Department: Physics

Area of Specialization: Condensed Matter Physics

Name of the Faculty Member(s): Dr.T.Ranjeth Kumar Reddy

Title of the Value Added Course: Solid State Physics

Course Code: PHY V 006

Course Duration: 30 hours [From July 1 to July 30 2020]

Introduction to the Course: This course is intended to provide an introduction to the physics of solids. We will begin by characterizing the properties of static (crystal structure) and dynamic (lattice vibrations) arrangements of atoms. Next we will study electrons in solids and will identify key features distinguishing metals, insulators and semiconductors. We will end with nearly free electron model, tight binding approximation. Topics of current interest will be covered throughout the course.

Course Outcomes: On successful completion of the course the students shall be able to:

1. Understand the crystal structure, electronic and vibrational properties of solid-state systems.
2. Explain the crystal systems in different materials
3. Predict the structure of solid-state systems

Course Content: Crystal Physics: Classification of condensed matter-crystalline and noncrystalline solids, Bonding in solids - Ionic, covalent and metallic solids, the van der Waals interaction, hydrogen bonding, crystal symmetry, point groups, space groups, lattices and basis, typical crystal structures. Unit 2: Reciprocal

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lattice, Bragg's law of diffraction, X-ray, neutron, and electron diffraction, Brillouin zone, structure factor. Defects in Crystals: Point defects - Frenkel and Schottky defects; Dislocations - models of screw and edge dislocations, Burgers vector; Surface imperfections – grain boundaries, tilt boundaries, twin boundaries and stacking faults; Volume defects.

Approval by the HOD

Department of Physics
School of Engineering
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Presidency University, Bengaluru

Department of Physics

School of Engineering

VAC DETAILS

Total number of hours:30

Value added Course(VAC) Name and Code:PHYV006

Name of the Instructor: Dr T Ranjeth Kumar Reddy

NOTE:1. If 1 or more classes are engaged on same day. Then change timings by repeating date

2. Enter date and timings according to the VAC class engaged

S.No.	STUDENT ID NO	STUDENT NAME	2/7/21	5/7/21	8/7/21	12/7/21	14/7/21	15/7/21	16/7/21	19/7/21	20/7/21	21/7/21	22/7/21	26/7/21	27/7/21	28/7/21	29/7/21	Total classes conducted	Total classes attended	Percentage attended
			5 -7 PM	5-7 PM	5-7PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM			
1	20201MEC0028	Appannagari Vamsi	p	P	p	p	p	p	p	A	p	p	p	p	p	p	p	30	28	93%
2	20201PET0027	YARRAMSETTI CHAITANYA SRI	p	A	A	p	p	p	p	A	p	p	p	p	P	p	A	30	22	73%
3	20201MCM0016	Z. Arshad Ahamed	p	P	p	p	p	p	p	P	p	A	p	p	P	p	P	30	28	93%
4	20201CIV0028	P VARUN	p	p	p	p	A	p	p	p	p	p	p	A	p	p	p	30	26	87%
5	20201CIV0029	PRAVEEN V PATIL	p	p	p	p	p	p	p	A	P	p	p	p	p	p	p	30	28	93%
6	20201MEC0020	Shirshendu Sarkar	p	p	p	p	p	p	p	p	p	p	p	p	A	p	A	30	26	87%
7	20201MCM0014	Adharsh kumar	p	p	p	p	p	p	p	P	p	A	p	p	p	p	p	30	28	93%
8	20201MCM0003	B SIVA SAI GOPI	A	p	p	p	p	p	A	p	p	p	p	p	p	p	p	30	26	87%
9	20201MEC0033	POTTURU THIRUMALA NAIDU	p	p	p	p	p	p	P	p	p	p	p	p	A	p	p	30	28	93%
10	20201CIV0031	Sunkara Jayaprakash	A	p	p	P	A	p	P	a	p	A	p	p	p	p	p	30	22	73%
11	20201MEC0007	Prithvi Y	p	p	p	A	p	A	p	p	p	A	p	A	p	p	p	30	22	73%
12	20201MEC0002	Balaji P	p	A	A	P	p	p	P	a	p	P	p	p	A	A	p	30	20	67%
13	20201MEC0017	PATAN ARSHAD ALI KHAN	p	P	p	p	p	p	P	p	p	p	A	p	P	p	P	30	28	93%
14	20201CIV9001	ABHISHEK MANTALE	A	p	p	p	p	p	p	p	p	p	p	p	p	p	p	30	28	93%
15	20201CIV0038	G Manjunath Reddy	p	P	A	p	p	p	a	p	a	p	p	p	P	A	P	30	22	73%

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Value Added Course Marksheet
School of Engineering

Course Code :	PHYV006	Academic Year :	2020-2021
Course Name :	Solid State Physics	Semester :	Even Semester
		Instructor-in-Charge Name :	Dr T Ranjeth Kumar Reddy
		Instructor-in-Charge Employee ID :	PUNIV00873

S. No	UID No	Roll No	Name	School (e.g. SoE/SoL etc)	Attendance (in %)	Marks	Eligible for Certificate (Y/N)	Remark
1		20201MEC0028	Appannagari Vamsi	SOE	93%	67	Y	NIL
2		20201PET0027	YARRAMSETTI CHAITANYA SRI	SOE	73%	78	Y	NIL
3		20201MCM0016	Z. Arshad Ahamed	SOE	93%	68	Y	NIL
4		20201CIV0028	P VARUN	SOE	87%	69	Y	NIL
5		20201CIV0029	PRAVEEN V PATIL	SOE	93%	82	Y	NIL
6		20201MEC0020	Shirshendu Sarkar	SOE	87%	69	Y	NIL
7		20201MCM0014	Adharsh kumar	SOE	93%	65	Y	NIL
8		20201MCM0003	B SIVA SAI GOPI	SOE	87%	66	y	NIL
9		20201MEC0033	POTTURU THIRUMALA NAIDU	SOE	93%	64	Y	NIL
10		20201CIV0031	Sunkara Jayaprakash	SOE	73%	63	Y	NIL
11		20201MEC0007	Prithvi Y	SOE	73%	78	Y	NIL
12		20201MEC0002	Balaji P	SOE	67%	98	Y	NIL
13		20201MEC0017	PATAN ARSHAD ALI KHAN	SOE	93%	78	Y	NIL
14		20201CIV9001	ABHISHEK MANTALE	SOE	93%	78	y	NIL
15		20201CIV0038	G Manjunath Reddy	SOE	73%	65	Y	NIL

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(Established under the Presidency University Act, 2013 of the Karnataka Act 41 of 2013)

Name of the School: SoE

Name of the Department: Physics

Area of Specialization: Condensed Matter Physics

Name of the Faculty: Dr. Harish Sharma Akkera

Tile of the Value Added Course: Semiconductor Optoelectronic devices

Course Code: PHY-301 **Course Duration: [30 hours]**

Introduction to the Course:

The main objective of this course is to study the concepts of semiconductor optoelectronics that help develop the ability to fabricate, design, and apply to engineering applications. This course covers the areas, namely, semiconductor physics, semiconductor light sources, and optoelectronic photodetector devices. The course includes the concepts of band gap engineering, heterostructure p-n junction diodes, Schottky junctions, and fabrication of heterostructure devices are discussed in a detailed manner. It also emphasizes LED device structure and output characteristics, materials for LED, Lasers, semiconductors & quantum well lasers. Finally, general characteristics of photodetectors, photoconductors, semiconductor photo-diodes, PIN diodes, and APDs: structure, materials, characteristics, and device performance, other photodetectors: Photo-Transistors, Solar cells, and CCDs are discussed.

Course Outcomes: On successful completion of the course the students shall be able to:

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01. Explain the properties of semiconductors, semiconductor light sources and optoelectronic photodetector devices.

02. Apply the knowledge of semiconductor physics in various optoelectronic device applications.

Course Content:

Module 1: Review on Semiconductors; Introduction to semiconductors, Types of Semiconductors, Band gap engineering, heterostructure p-n junction diodes, Schottky Junctions and Ohmic contacts, Fabrication of Heterostructure devices.

Module 2: Semiconductor light sources; Injection Electroluminescence, Light Emitting Diode: Device structure and output characteristics, modulation bandwidth, materials for LED, and applications, Laser basics, semiconductor laser: Device structure and output characteristics, Quantum well lasers, Practical laser diodes & handling

Module 3: Semiconductor Photodetectors; General characteristics of photodetectors, the Impulse response of photodetectors, Photoconductors, semiconductor photo-diodes, PIN diodes, and APDs: Structure, Materials, Characteristics, and Device performance, Other photodetectors: Photo-Transistors, Solar cells, and CCDs.

Approval by the HOD.

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Presidency University, Bengaluru

Department of __Physics_____

School of _____Engineering__

NOTE:1. If 1 or more classes are engaged on same day. Then change timings by repeating date

2. Enter date and timings according to the VAC class engaged

VAC DETAILS

Total number of hours:30

Value added Course(VAC) Name and Code: Semiconductor Optoelectronic Devices and PHY V009

Name of the Instructor: Dr. Harish Sharma Akkera

S.No.	STUDENT ID NO	STUDENT NAME	05/07/2021	06/07/2021	07/07/2021	08/07/2021	09/07/2021	10/07/2021	12/07/2021	13/07/2021	14/07/2021	15/07/2021	16/07/2021	19/07/2021	20/07/2021	21/07/2021	22/07/2021	Total classes conducted	Total classes attended	Percentage attended
			5 to 7 pm	5 to 7 pm	5 to 7 pm	5 to 7 pm	5 to 7 pm	5 to 7 pm	5 to 7 pm	5 to 7 pm	5 to 7 pm	5 to 7 pm	5 to 7 pm	5 to 7 pm	5 to 7 pm	5 to 7 pm	5 to 7 pm			
1	20201CSE0388	Bommisetty Sai Deepak	P	P	A	P	A	P	P	P	P	P	P	P	P	P	P	30	26	87%
2	20201CAI0212	PAPPURI MAHINDRA	P	P	P	P	P	A	P	P	P	P	A	P	P	P	P	30	26	87%
3	20201CDV0007	JAYANTH REDDY M	P	P	P	P	P	P	P	A	A	P	P	P	P	P	P	30	26	87%
4	20201ECE0045	PUTHA VENKATA KARTHIK REDDY	A	P	P	A	P	A	P	P	P	P	P	P	P	P	A	30	22	73%
5	20201CEI0129	JANIPALLI DHEERAJ KRISHNA REDDY	P	P	A	P	A	P	P	P	P	P	P	A	P	A	P	30	22	73%
6	20201ECE0131	Danduprolu Hemanth Kumar	P	P	P	P	P	P	P	A	A	P	P	P	P	P	P	30	26	87%
7	20201ISB0019	siripuram rajesh	P	A	P	P	P	A	P	P	P	P	P	P	P	P	P	30	26	87%
8	20201CSE0148	Vm mohammed anees	A	A	A	P	P	P	P	A	P	P	A	P	P	P	P	30	20	67%
9	20201CSD0071	SUNKUGARI CHARAN KUMAR REDDY	P	P	P	P	P	P	A	P	A	P	P	A	A	A	P	30	20	67%
10	20201CIT0072	Kongani Bhargava	P	P	P	P	P	P	P	P	A	P	A	P	P	P	P	30	26	87%
11	20201CSE0611	Supriyo Deb	P	P	P	P	A	P	P	P	P	P	P	A	P	P	A	30	24	80%
12	20201ECE0151	SNEHAN THEJASWI T	P	A	P	P	P	P	P	P	P	P	P	P	A	P	P	30	26	87%
13	20201CSE0771	Praval P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	30	28	93%
14	20201CAI0157	BHUVAN S	A	P	P	P	A	P	A	P	P	P	A	P	A	P	A	30	18	60%

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Presidency University, Bengaluru
Value Added Course Marksheet
School of Engineering

Course Code :	PHY V 009	Academic Year :	2020-2021
Course Name :	Semiconductor Optoelectronic devices	Semester :	Even Semester
		Instructor-in-Charge Name :	Dr. Harish Sharma Akkera
		Instructor-in-Charge Employee ID :	PUNIV01155

S. No	UID No	Roll No	Name	School (e.g. SoE/SoL etc)	Attendance (in %)	Marks	Eligible for Certificate (Y/N)	Remark
1		20201CSE0388	Bommisetty Sai Deepak	SoE	87%	64	Y	NIL
2		20201CAI0212	PAPPURI MAHINDRA	SoE	87%	74	Y	NIL
3		20201CDV0007	JAYANTH REDDY M	SoE	87%	99	Y	NIL
4		20201ECE0045	PUTHA VENKATA KARTHIK REDDY	SoE	73%	77	Y	NIL
5		20201CEI0129	JANIPALLI DHEERAJ KRISHNA REDDY	SoE	73%	67	Y	NIL
6		20201ECE0131	Danduprolu Hemanth Kumar	SoE	87%	67	Y	NIL
7		20201ISB0019	siripuram rajesh	SoE	87%	82	Y	NIL
8		20201CSE0148	Vm mohammed anees	SoE	67%	68	Y	NIL
9		20201CSD0071	SUNKUGARI CHARAN KUMAR REDDY	SoE	67%	58	Y	NIL
10		20201CIT0072	Kongani Bhargava	SoE	87%	84	Y	NIL
11		20201CSE0611	Supriyo Deb	SoE	80%	77	Y	NIL
12		20201ECE0151	SNEHAN THEJASWI T	SoE	87%	86	Y	NIL
13		20201CSE0771	Praval P	SoE	93%	94	Y	NIL
14		20201CAI0157	BHUVAN S	SoE	60%	35	N	NIL

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Department of Engineering School of Engineering PRESIDENCY UNIVERSITY Rajanukunte, Yelahanka, Bengaluru

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Name of the School: Engineering **Name of the Department: Physics**

Area of Specialization: Games **Name of the Faculty Member(s): Dr. Pradeep Bhaskar**

Title of the Value Added Course: Physics in Games
Course Code: PHY V 014 **Course Duration: 30 hours [From Aug 2 to Aug 27 2021]**

Introduction to the Course: This course is a hands on experience of applying concepts in physics to a virtual environment. It demonstrates the important part of physics in computer based games and virtual reality environments. Many games like GTA (Grand Theft Auto), Oblivion, Half-Life, Crackdown, among others use principles of physics in real world to make the games more realistic. The course is both conceptual and analytical in nature while developing critical thinking and analytical skills. The course also enhances the programming abilities through assignments.

The course will give an experience in modifying computer programs to obtain the desired results. The ability to think out of the box, confidence in facing new issues and self-learning will be encouraged through various assignments. Students will be using Python and IDLE/Jupyter installed in computer lab or on own laptops during this course.

Course Outcomes: On successful completion of the course the students shall be able to:

1] Identify various physics concepts applied in computer games and virtual reality environments.

2] Apply Physics concepts into mathematical language.

3] Compute simplified real life physics phenomenon in a computer programing language

4] Rewrite a working program which includes applied concepts of physics

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Course Content:

Module: 1

Fundamental topics in Newtonian mechanics such as vectors, center of mass, Newton's laws, inertia, linear and angular velocity and acceleration, momentum and general motion in two and three dimensions. Simulating the topics in mathematical and programing language.

Module: 2

Force and torque including drag forces, force fields, and pressure. Conservation of energy applied in collisions and projectile motion. Oscillations in spring and pendulum. Simulating the topics in mathematical and programing language.

Module: 3

Euler's method and Runge-kutta methods of calculating integrals. Vector and matrix operations. Implementing the methods in programing language.

Module: 4

Rigid body dynamics and simulation of particles, rigid bodies and connected rigid bodies.
Programing a simple particle model, rigid body model and tuning with project.

Approval by the HOD

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Presidency University, Bengaluru

Department of Physics

School of Engineering

NOTE:1. If 1 or more classes are engaged on same day. Then change timings by repeating date

2. Enter date and timings according to the VAC class engaged

VAC DETAILS

Total number of hours:30

Value added Course(VAC) Name and Code: Physics in Games PHY V014

Name of the Instructor: Dr. Pradeep Bhaskar

S.No.	STUDENT ID NO	STUDENT NAME	2-08-2021	3-08-2021	4-08-2021	5-08-2021	6-08-2021	9-08-2021	10-08-2021	12-08-2021	13-08-2021	17-08-2021	18-08-2021	19-08-2021	23-08-2021	25-08-2021	27-08-2021	Total classes conducted	Total classes attended	Percentage attended
			5:00pm-7:00pm	00pm-7:00p	00pm-7:00p	00pm-7:00p	00pm-7:00p	00pm-7:00p	00pm-7:00p	00pm-7:00p	00pm-7:00p	00pm-7:00p	00pm-7:00p	00pm-7:00p	00pm-7:00p	00pm-7:00p	00pm-7:00p			
1	20201CSE0547	HARSHITHA D	P	P	P	P	A	P	P	P	P	P	A	P	P	P	P	30	26	87%
2	20201CSE0548	MADAN KUMAR S L	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	30	100%
3	20201CSE0549	SANTHOSH.A	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	30	28	93%
4	20201CSE0550	BHUVAN HEBBAR	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	30	100%
5	20201CSE0551	ABHAY G R	P	P	P	P	P	P	A	P	P	P	P	P	A	P	P	30	26	87%
6	20201CSE0552	D THARUN	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	30	100%
7	20201CSE0553	CHANDANA P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	30	28	93%
8	20201CSE0554	PUNEETH	P	A	P	P	P	P	P	P	P	P	A	P	P	P	P	30	26	87%
9	20201CSE0555	POOJITHA B	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	30	100%
10	20201CSE0556	PRAMOD H	P	P	P	P	P	A	P	P	P	P	P	A	P	P	P	30	26	87%
11	20201CSE0557	SACHIN S	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	30	100%
12	20201CSE0558	NAVEEN R	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	28	93%
13	20201CSE0559	SRUSHTI MALIPATIL	P	P	A	P	P	P	P	P	P	P	P	P	P	P	A	30	26	87%
14	20201CSE0560	CHANDAN B M	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	30	28	93%
15	20201CSE0561	MANOJ T M	P	P	A	A	A	P	P	P	P	A	A	A	P	A	A	30	14	47%
16	20201CSE0562	AVINASH	P	P	A	P	P	P	P	P	P	P	P	A	P	P	P	30	26	87%
17	20201CSE0563	KOMALA PRABHU P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	30	28	93%

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Value Added Course Marksheet
School of Engineering

Course Code :		PHY V 014		Academic Year :			2020-2021	
Course Name :		Physics in Games		Semester :			Even Semester	
				Instructor-in-Charge Name :			Dr. Pradeep Bhaskar	
				Instructor-in-Charge Employee ID :			Dr. Pradeep Bhaskar	

S. No	UID No	Roll No	Name	School	Attendance (in %)	Marks	Eligible for Certificate (Y/N)	Remark
1	202010101694	20201CSE0547	HARSHITHA D	SoE	87%	95	Y	NIL
2	202010102468	20201CSE0548	MADAN KUMAR S L	SoE	100%	83	Y	NIL
3	202010101704	20201CSE0549	SANTHOSH.A	SoE	93%	99	Y	NIL
4	202010102470	20201CSE0550	BHUVAN HEBBAR	SoE	100%	72	Y	NIL
5	202010101713	20201CSE0551	ABHAY G R	SoE	87%	71	Y	NIL
6	202010102479	20201CSE0552	D THARUN	SoE	100%	91	Y	NIL
7	202010101710	20201CSE0553	CHANDANA P	SoE	93%	98	Y	NIL
8	202010101707	20201CSE0554	PUNEETH	SoE	87%	72	Y	NIL
9	202010101714	20201CSE0555	POOJITHA B	SoE	100%	95	Y	NIL
10	202010102482	20201CSE0556	PRAMOD H	SoE	87%	88	Y	NIL
11	202010102480	20201CSE0557	SACHIN S	SoE	100%	91	Y	NIL
12	202010102483	20201CSE0558	NAVEEN R	SoE	93%	92	Y	NIL
13	202010102488	20201CSE0559	SRUSHTI MALIPATIL	SoE	87%	65	Y	NIL

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14	202010101737	20201CSE0560	CHANDAN B M	SoE	93%	94	Y	NIL
15	202010101730	20201CSE0561	MANOJ T M	SoE	47%	43	N	NIL
16	202010101734	20201CSE0562	AVINASH	SoE	87%	57	Y	NIL
17	202010101743	20201CSE0563	KOMALA PRABHU P	SoE	93%	75	Y	NIL

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Signature of HoD

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Name of the School: SOE **Name of the Department:** Physics

Area of Specialization: Solar Energy **Name of the Faculty Member:** Dr. Mohan Kumar Naidu

Title of the Value Added Course: Photovoltaic Solar Energy

Course Duration: [30 hours] [AY-2020-21]

Course Code: PHY V 001

Introduction to the Course:

The main objective of this course is to study the fundamentals of solar energy and its applications. This course covers the overview of semiconductors, its properties and fundamentals of photovoltaic conversions. This course is also covers the different methods of synthesis of photovoltaic cells and students can able to study the Characterization of synthesized materials using IV characteristics, open-circuit voltage and operating voltage of a PV cell, standard rating and performance indicator for PV modules.

Course Outcomes: On successful completion of the course the students shall be able to:

1. Enabling the Students to learn the basics of solar energy

2. Impart basic knowledge on various synthesis and characterization techniques involved in solar cells

3. Explain the future use of photovoltaic cells in different areas.

Course Content (Syllabus):

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Module -1

Overview of semiconductors, properties, the electron band structure of semiconductors, n-type doping , p-type doping, direct and indirect band gap semiconductors, exciton formation, fundamentals of photovoltaic conversions- photon energy, electron-hole concentration and Fermi –level, p-n junction, light absorption in a semiconductor, solar cell materials.

[15 Hrs] [Blooms level selected: Knowledge]

Module: 2:

Generations of photovoltaic cells, Voltage and current characteristics of photovoltaic devices (i-v curve), open-circuit voltage and operating voltage of a PV cell, dependence of voltage and current on temperature, different types of photovoltaic devices, standard rating and performance indicator for PV modules, photovoltaic system schematic design, photovoltaic applications.

[15 Hrs] [Blooms level selected: Application]

Reference Books

1. Solar Energy, Fundamentals and Applications, H P Garg and J Prakash, Mc Graw Hill.

2. Solar Energy, Technologies and Project Delivery for Buildings, Andy Walker, Wiley.

Department of Physics
School of Engineering
PRESIDENCY UNIVERSITY
Rajanukunte, Yelahanka, Bengaluru -64

Approval by the HOD.

PRESIDENCY UNIVERSITY IQAC BANGALORE

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PRESIDENCY UNIVERSITY Registrar BANGALORE

Presidency University, Bengaluru

Department of Physics

School of Engineering

NOTE:1. If 1 or more classes are engaged on same day. Then change timings by repeating date

2. Enter date and timings according to the VAC class engaged

VAC DETAILS

Total number of hours:30

Value added Course(VAC) Name and Code: Photovoltaic Solar Energy, PHY V 001

Name of the Instructor: Dr P Mohan Kumar Naidu

S.No.	STUDENT ID NO	STUDENT NAME	10.07.2021	11.07.2021	07-12-21	17-07-2021	17-07-2021	23-07-2021	23-07-2021	24-07-2021	24-07-2021	08-02-21	08-02-21	08-03-21	08-03-21	08-06-21	08-09-21	08-09-21	08-10-21	08-10-21	16.08.2021	16.08.2021	20-08-2021	21-08-2021	23-08-2021	23-08-2021	24-08-2021	24-08-2021	26-08-2021	27-08-2021	28-08-2021	28-08-2021	Total classes conducted	Total classes attended	Percentage attended
			10.00 to 11.00	1.00 to 12.0	3.30 to 4.30	2 to 3	3 to 4	2 to 3	3 to 4	2 to 3	3 to 4	2 to 3	3 to 4	2 to 3	3 to 4	7 to 8	2 to 3	3 to 4	2 to 3	3 to 4	2 to 3	3 to 4	7 to 8	7 to 8	2 to 3	3 to 4	2 to 3	3 to 4	2 to 3	3 to 4	2 to 3	3 to 4			
1	20201CEI0096	BALAGANI GOWTHAM CHANDRA	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	30	28	93
2	20201CEI0113	A.V SANTHOSH KUMAR	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	30	28	93
3	20201CEI0155	R JATIN KUMAR	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	30	100
4	20201CEI0166	SHAIK GAFFAR	A	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	A	P	P	30	26	87
5	20201CEI0167	Naveen menthula	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	30	100
6	20201CEI0168	NAVEEN V	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	A	P	30	28	93
7	20201CEI0169	Nelli Sravan kumar	P	P	P	P	A	A	A	A	P	P	P	A	P	P	P	P	P	P	P	P	P	P	A	A	A	A	A	A	A	30	18	60
8	20201CEI0170	MODEPALLI SHANMUKHA DURGA PI	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	A	P	30	28	93
9	20201CEI0173	LAVANYA	P	P	P	P	A	A	A	A	A	A	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	A	A	A	30	18	60
10	20201CEI0174	SHRAVANI CHANDRASHEKAR	P	P	P	P	P	A	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	A	A	P	P	P	30	26	87
11	20201CEI0175	Chowdam LIKITHA	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	30	29	97
12	20201CEI0176	MUTHINENI SESHU BABU	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	30	100
13	20201CIT0040	GAALI MOHAN VINAY SREEKAR RED	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	30	28	93
14	20201CIT0080	RAHUL GOWDA H R	A	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	A	P	P	P	30	26	87
15			P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	A	30	27	90

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REGISTRAR

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Presidency University, Bengaluru
Value Added Course Marksheet
School of Engineering

Course Code :	PHY V 001	Academic Year :	2019-2020
Course Name :	Photovoltaic Solar Energy	Semester :	Even
		Instructor-in-Charge Name :	Dr P Mohan Kumar Naidu
		Instructor-in-Charge Employee ID :	PUNIV0023

S. No	UID No	Roll No	Name	SoE	Attendance (in %)	Marks	Eligible for Certificate (Y/N)	Remark
1		20201CEI0096	BALAGANI GOWTHAM CHANDRA	SoE	93	80	Y	
2		20201CEI0113	A.V SANTHOSH KUMAR	SoE	93	83	Y	
3		20201CEI0155	R JATIN KUMAR	SoE	100	85	Y	
4		20201CEI0166	SHAIK GAFFAR	SoE	87	77	Y	
5		20201CEI0167	Naveen menthula	SoE	100	76	Y	
6		20201CEI0168	NAVEEN V	SoE	93	91	Y	
7		20201CEI0169	Nelli Sravan kumar	SoE	60	65	N	
8		20201CEI0170	MODEPALLI SHANMUKHA DURGA PRASAD	SoE	93	78	Y	
9		20201CEI0173	LAVANYA	SoE	60	66	N	
10		20201CEI0174	SHRAVANI CHANDRASHEKAR	SoE	87	77	Y	
11		20201CEI0175	Chowdam LIKITHA	SoE	97	87	Y	
12		20201CEI0176	MUTHINENI SESHU BABU	SoE	100	89	Y	
13		20201CIT0040	GAALI MOHAN VINAY SREEKAR REDDY	SoE	93	82	Y	
14		20201CIT0080	RAHUL GOWDA H R	SoE	87	76	Y	

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Department of Physics
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PRESIDENCY UNIVERSITY

(Established under the Presidency University Act, 2013 of the Karnataka Act 41 of 2013)

Name of the School: Presidency University

Name of the Department: PHYSICS

Area of Specialization: Condensed matter Physics, Spectroscopy

Name of the Faculty Member/Members: Dr. Bharathi D

Tile of the Value Added Course: Nanotechnology

Course Duration: [30 hours]

Course Code: PHYV012

Course Description:

After viewing Introduction to Nano Measurement Tools:

Students will be able to recognize the challenge of nano scale measurement from traditional "measurement" and relate it to a practical example. Explain the difference between an optical and electron microscope. Name types of information nano-measurement tools can measure. Generally express how nano-measurement tools work

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After viewing Introduction to Nano Fabrication Tools:

Students will be able to identify conductive materials. Recognize nanotechnology in commercial products. Discriminate length scales associated with lithography, deposition, and etching. Generally express how nano-fabrication tools work. Explain why environmental control is necessary in nanofabrication

Course Outcomes: On successful completion of the course the students shall be able to:

01: Recognize the types of information nano-measurement tools can measure and express how nano-measurement tools work.

02: Recognize Nanotechnology in commercial product.

03: Express how nano-fabrication tools work.

Course Content:

SL. No.	Topic	
1	Introduction to Nanotechnology	
2	Nano Measurement and Characterization Tools	
	2.1	Scanning Electron Microscopy and Energy-Dispersive X-ray Spectroscopy
	2.2	Transmission Electron Microscopy
	2.3	X-Ray and Optical Characterization
3	Nanofabrication	
	3.1	Vacuum Pumps and Thin Film Vacuum Deposition
	3.2	Vapor Deposition
	3.3	Patterning and Self-Assembly
	3.4	Etching

Approval by the HOD.

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Presidency University, Bengaluru

Department of Physics

School of Engineering

VAC DETAILS

Total number of hours:30

Value added Course(VAC) Name and Code: Nanotechnology, PHYV012

Name of the Instructor: Dr Bharathi D

NOTE:1. If 1 or more classes are engaged on same day. Then change timings by repeating date

2. Enter date and timings according to the VAC class engaged

S.No.	STUDENT ID NO	STUDENT NAME	2/7/21	5/7/21	8/7/21	12/7/21	14/7/21	15/7/21	16/7/21	19/7/21	20/7/21	21/7/21	22/7/21	26/7/21	27/7/21	28/7/21	29/7/21	Total classes conducted	Total classes attended	Percentage attended
			5 -7 PM	5-7 PM	5-7PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM			
1	20201MEC0040	RATHAN KUMAR GOWDA V	p	P	p	p	p	p	p	A	p	p	p	p	p	p	p	30	28	93%
2	20201MEC0041	MOHAMMED SUFYAN	p	A	A	p	p	p	p	A	p	p	p	p	P	p	A	30	22	73%
3	20201IST0048	TIRUMAREDDI NARESH	p	P	p	p	p	p	p	P	p	A	p	p	P	p	P	30	28	93%
4	20201IST0049	PRASHANT SINGH	p	p	p	p	A	p	p	p	p	p	p	A	p	p	p	30	26	87%
5	20201IST0050	MUSKAN ALI	p	p	p	p	p	p	p	A	P	p	p	p	p	p	p	30	28	93%
6	20201IST0051	KEERTHANA V	p	p	p	p	p	p	p	p	p	p	p	p	A	p	A	30	26	87%
7	20201IST0052	NUPUR PURI	p	p	p	p	p	p	p	P	p	A	p	p	p	p	p	30	28	93%
8	20201IST0053	SUFIYA TANZEEN	A	p	p	p	p	p	A	p	p	p	p	p	p	p	p	30	26	87%
9	20201IST0054	RESHMA BAI S	p	p	p	p	p	p	P	p	p	p	p	p	A	p	p	30	28	93%
10	20201IST0055	KHUSHI	A	p	p	P	A	p	P	a	p	A	p	p	p	p	p	30	22	73%
11	20201ISE0045	VENU KISHORE S B	p	p	p	A	p	A	p	p	p	A	p	A	p	p	p	30	22	73%
12	20201ISE0047	VEERESH SHETTY	p	A	A	P	p	p	P	a	p	P	p	p	A	A	p	30	20	67%
13	20201ISE0048	M GRANTHA KUSHALAPPA	p	P	p	p	p	p	P	p	p	p	A	p	P	p	P	30	28	93%
14	20201ISE0049	SUDARSHAN V	A	p	p	p	p	p	p	p	p	p	p	p	p	p	p	30	28	93%
15	20201ISE0050	PURVIKA S	p	P	A	p	p	p	a	p	a	p	p	p	P	A	P	30	22	73%
16	20201ISE0052	VISHNU R	p	P	p	p	p	p	P	p	p	p	A	p	P	p	P	30	28	93%

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Presidency University, Bengaluru
Value Added Course Marksheet
School of Engineering

Course Code :	PHYV006	Academic Year :	2020-2021
Course Name :	Nanotechnology	Semester :	Even Semester
		Instructor-in-Charge Name :	Dr Bharathi D
		Instructor-in-Charge Employee ID :	PUNIV01370

S. No	UID No	Roll No	Name	School (e.g. SoE/SoL etc)	Attendance (in %)	Marks	Eligible for Certificate (Y/N)	Remark
1		20201MEC0040	RATHAN KUMAR GOWDA V	SOE	93%	67	Y	NIL
2		20201MEC0041	MOHAMMED SUFYAN	SOE	73%	78	Y	NIL
3		20201IST0048	TIRUMAREDDI NARESH	SOE	93%	68	Y	NIL
4		20201IST0049	PRASHANT SINGH	SOE	87%	69	Y	NIL
5		20201IST0050	MUSKAN ALI	SOE	93%	82	Y	NIL
6		20201IST0051	KEERTHANA V	SOE	87%	69	Y	NIL
7		20201IST0052	NUPUR PURI	SOE	93%	65	Y	NIL
8		20201IST0053	SUFIYA TANZEEN	SOE	87%	66	y	NIL
9		20201IST0054	RESHMA BAI S	SOE	93%	82	Y	NIL
10		20201IST0055	KHUSHI	SOE	73%	63	Y	NIL
11		20201ISE0045	VENU KISHORE S B	SOE	73%	78	Y	NIL
12		20201ISE0047	VEERESH SHETTY	SOE	67%	98	Y	NIL
13		20201ISE0048	M GRANTHA KUSHALAPPA	SOE	93%	78	Y	NIL
14		20201ISE0049	SUDARSHAN V	SOE	93%	78	y	NIL
15		20201ISE0050	PURVIKA S	SOE	73%	65	Y	NIL

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16		20201ISE0052	VISHNU R	SOE	87%	69	Y	NIL

Department of Physics
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Signature of HoD

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PRESIDENCY UNIVERSITY

(Established under the Presidency University Act, 2013 of the Karnataka Act 41 of 2013)

Name of the School: SOE **Name of the Department:** Physics

Area of Specialization: Materials Science **Name of the Faculty Member:** Dr. Naveen C S

Title of the Value Added Course: Metal oxide nanomaterials for gas sensor applications**.** **Course Duration:** [30 hours]

Course Code: PHYV007

Introduction to the Course:

The main objective of this course is to study the basic concepts of Metal oxide nanomaterials and their application in the field of gas sensors. The course includes the introduction to classification of nanomaterials, quantum size effect, Distinction between bulk materials and nanomaterials. It also includes different methods of preparation techniques and structural characterizations of metal oxide nanomaterials. Further, the classification of gas sensors, gas sensing mechanism, choice of sensing material and gas sensor characteristics are included. Class 11^{th} and 12^{th} Physics and Chemistry are course prerequisites.

Course Outcomes: On successful completion of the course the students shall be able to :

01 Understand the basic concept of nanomaterials and metal oxide nanomaterials.

02 Know the different types of preparation techniques and structural characterizations of metal oxide nanomaterials.

03 Apply the knowledge of preparation and structural characterizations of metal oxide nanomaterials in gas sensing applications.

Course Content (Syllabus):

Module:1: Introduction: Definitions, Classification of nanostructures- 1D, 2D and 3D, Effects of making into small, Distinction between nanomaterials and bulk materials in terms of energy band, Quantum size effect- Quantum confinement in 1D, 2D and 3D, Metal oxides- Types of metal oxides nanomaterials, Applications.

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[10 Hrs] [Blooms level selected: Knowledge]

Module: 2: Preparation and Structural Characterizations of Metal oxide nanomaterials: Preparation techniques: Top Down method - Ball milling, Bottom up method - Sol gel process, Solution combustion method and Hydrothermal Process. Structural Characterizations: UV-Visible spectrophotometer, Fourier-transform infrared spectrometer (FTIR), X-ray Diffractometer (XRD), Scanning Electron Microscopy (SEM), Energy dispersive X-ray analysis (EDAX), ; Transmission Electron Microscope (TEM)

[12 Hrs] [Blooms level selected: Comprehension]

Module: 3: Metal oxide gas sensors: Introduction, Gas sensor terminology, Classification of gas sensors, General sensing mechanism, Ideal gas sensor characteristics, Choice of sensing material, Advantages and disadvantages of metal oxide gas sensors, Future perspectives.

[08 Hrs] [Blooms level selected: Application]

References

R1**.** NANO: The Essentials: Understanding Nanoscience and Nanotechnology by T Pradeep, McGraw-Hill education.

R2. Materials Characterization by Yang Leng, JohnWiley & Sons (Asia) Publications.

R3. Introduction to Nanotechnology by Charles Poole and Frank J. Owens, Wiley Publications.

R4. Metal Oxide Nanostructures: Synthesis, Properties and Applications by Daniela Nunes, Ana Pimentel, Lidia Santos, Pedro Barquinha, Elvira Fortunato, Luis Pereira, Rodrigo Martins, Elsevier Science Publications.

R5. Gas Sensors: Principles, Operation and Developments by G. Sberveglieri, Springer Publications.

Approval by the HOD.

Department of Physics
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Presidency University, Bengaluru

Department of Physics

School of Engineering

VAC DETAILS

Total number of hours:30

Value added Course(VAC) Name and Code:PHYV007

Name of the Instructor: Dr Naveen C S

NOTE:1. If 1 or more classes are engaged on same day. Then change timings by repeating date

2. Enter date and timings according to the VAC class engaged

S.No.	STUDENT ID NO	STUDENT NAME	3/7/20	6/7/20	7/7/20	10/7/20	13/7/20	14/7/20	16/7/20	17/7/20	20/7/20	21/7/20	22/7/20	24/7/20	27/7/20	28/7/20	29/7/20	Total classes conducted	Total classes attended	Percentage attended
			6 -8 PM	6-8 PM	6-8 PM	6-8 PM	6-8 PM	6-8 PM	6-8 PM	6-8 PM	6-8 PM	6-8 PM	6-8 PM	6-8 PM	6-8 PM	6-8 PM	6-8 PM			
1	20201ECE0253	HANUMANTHARAYAPPA GARIDHARNESH	p	P	p	p	p	p	p	A	p	p	p	p	A	p	P	30	26	86%
2	20201CEI0033	SOUDU LOORDU PRATHYUSH REDDY	p	A	A	p	p	p	p	A	p	p	p	p	P	p	P	30	24	80%
3	20201CIT0029	Vinod C	p	P	p	p	p	p	p	P	p	A	p	p	P	p	P	30	28	93%
4	20201CSE0369	k.B.P chandrasekhar	p	p	p	p	A	p	p	p	p	p	p	A	p	p	p	30	24	80%
5	20201CSE0120	Mangamuri Ramu	p	p	p	p	p	p	p	A	P	p	p	p	p	p	p	30	28	93%
6	20201CIT0073	M VENU GOPAL	p	p	A	p	p	p	p	a	a	p	p	p	A	p	A	30	20	67%
7	20201CSE0496	Vishal Srivastava	p	p	p	p	p	p	p	P	p	A	p	p	p	p	p	30	28	93%
8	20201IST0050	MUSKAN ALI	A	p	p	p	p	p	A	a	p	p	p	p	p	p	p	30	24	80%
9	20201ECE0251	Palasala Doondeeswar .	p	p	p	p	p	p	P	p	p	p	p	p	A	p	p	30	28	93%
10	20201CIT0115	Chaithanya K B	A	p	p	P	A	p	P	a	p	A	A	p	p	p	p	30	20	67%
11	20201CBD0046	AFIYA AMREEN	p	p	p	A	p	A	a	p	p	A	p	A	p	p	p	30	20	67%
12	20201CBC0038	NISARGA S GADDIGE	p	A	A	P	p	p	P	a	p	P	p	p	A	A	A	30	20	67%
13	20201CSE0786	LIKHITA PRASAD	p	P	p	p	p	p	P	p	p	p	A	p	P	p	P	30	28	93%
14	20201CIT0006	Goli Koteswararao	A	A	p	p	p	p	a	a	a	p	p	p	A	p	A	30	16	53%
15	20201CSD0015	PRATHAM MD	p	P	A	p	p	p	a	p	a	p	p	p	P	A	A	30	22	73%

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Presidency University, Bengaluru
Value Added Course Marksheet
School of Engineering

Course Code :	PHYV007	Academic Year :	2020-21
Course Name :	Metal oxide nanomaterials for gas sensor applications	Semester :	Even Semester
		Instructor-in-Charge Name :	Dr Naveen C S
		Instructor-in-Charge Employee ID :	Dr Naveen C S

S. No	UID No	Roll No	Name	School (e.g. SoE/SoL etc)	Attendance (in %)	Marks	Eligible for Certificate (Y/N)	Remark
1		20201ECE0253	HANUMANTHARAYAPPA GARIDHARNESH	SOE	86%	53	Y	NIL
2		20201CEI0033	SOUDU LOORDU PRATHYUSH REDDY	SOE	80%	56	Y	NIL
3		20201CIT0029	Vinod C	SOE	93%	80	Y	NIL
4		20201CSE0369	k.B.P chandrasekhar	SOE	80%	78	Y	NIL
5		20201CSE0120	Mangamuri Ramu	SOE	93%	45	Y	NIL
6		20201CIT0073	M VENU GOPAL	SOE	67%	43	Y	NIL
7		20201CSE0496	Vishal Srivastava	SOE	93%	50	Y	NIL
8		20201IST0050	MUSKAN ALI	SOE	80%	60	Y	NIL
9		20201ECE0251	Palasala Doondeeswar .	SOE	93%	78	Y	NIL
10		20201CIT0115	Chaithanya K B	SOE	67%	56	Y	NIL
11		20201CBD0046	AFIYA AMREEN	SOE	67%	76	Y	NIL
12		20201CBC0038	NISARGA S GADDIGE	SOE	67%	20	N	NIL
13		20201CSE0786	LIKHITA PRASAD	SOE	93%	80	Y	NIL
14		20201CIT0006	Goli Koteswararao	SOE	53%	56	Y	NIL

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15		20201CSD0015	PRATHAM MD	SOE	73%	78	Y	NIL

Department of Physics
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Signature of HoD

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PRESIDENCY UNIVERSITY

GAIN MORE KNOWLEDGE
REACH GREATER HEIGHTS

(Established under the Presidency University Act, 2013 of the Karnataka Act 41 of 2013)

Name of the School: Engineering

Name of the Department: Physics

Area of Specialization: Nanomaterials

Name of the Faculty Member(s): Dr. Anindita B

Title of the Value Added Course: Nanostructured Materials

Course Code: PHY V 008

Course Duration: 30 hours [From July 1, 2021 to July 31, 2021]

Introduction to the Course: Nanotechnology is considered as the base of next technological revolution. This course is intended to make students aware of different nanostructured materials. Students will be given knowledge of different synthesis techniques of nanomaterial, characterization of nanomaterial by several techniques. Student should be able to analyze the need of proper characterization technique for a particular material. Applications of nanostructured materials in different fields of technology will be discussed.

Course Outcomes: On successful completion of the course the students shall be able to:

1. Understand different nanostructured materials, their properties and synthesis techniques.
2. Demonstrate different nanostructured materials, their properties and synthesis techniques
3. Explain the application of nanomaterials in different technological fields.

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Course Content: Topics include Introduction to nanomaterials, effects of nanosize, mesoscopic state, Effect of size on material properties: scaling effect on the properties of materials, Different nanostructures : nanofilm, nanowire, quantum dot, Synthesis of nanomaterials : top down and bottom up method, Characterization techniques like TEM, SEM, UV spectrometer, properties and applications of nanomaterials.

Approval by the HOD

Department of Physics
School of engineering
PRESIDENCY UNIVERSITY
Rajanukunte, Yelahanka, Bengaluru -64

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Presidency University, Bengaluru

Department of Physics

School of Engineering

VAC DETAILS

Total number of hours:30

Value added Course(VAC) Name and Code:PHY V008, Nanostructured Materials

Name of the Instructor: Dr Anindita B

NOTE:1. If 1 or more classes are engaged on same day. Then change timings by repeating date

2. Enter date and timings according to the VAC class engaged

S.No.	STUDENT ID NO	STUDENT NAME	1/7/21	2/7/21	5/7/21	7/7/21	9/7/21	12/7/21	14/7/21	16/7/21	19/7/21	21/7/21	22/12/20	23/7/21	26/7/21	28/7/21	30/7/21	Total classes conducted	Total classes attended	Percentage attended
			5 -7 PM	5-7 PM	5-7PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM			
1	20201CCS0002	DASARI KARTHIJA	p	P	p	p	p	p	p	A	p	p	p	p	p	p	p	30	28	93%
2	20201CIT0107	ADITYA MISHRA	p	A	A	p	p	p	p	p	p	p	p	p	P	p	p	30	26	87%
3	20201CSE0274	Arjun R	p	P	p	p	p	p	p	P	p	A	p	p	P	p	P	30	28	93%
4	20201CSE0249	k Sudheer Kumar	p	p	A	p	A	p	p	p	p	p	p	A	p	p	p	30	24	80%
5	20201CST0172	B DHEERAJ	p	p	p	p	A	p	p	A	P	p	p	A	A	p	p	30	22	73%
6	20201CST0007	THONDAMANATI CHANDANA SRI	p	p	A	p	p	p	p	p	p	p	p	p	A	p	p	30	26	87%
7	20201CSE0107	Nikhil Singh	p	p	p	p	A	p	p	P	p	A	p	p	p	p	p	30	26	87%
8	20201ECE0118	S CHAITHANYA KUMAR REDDY	A	p	p	p	p	p	p	p	p	p	p	p	p	p	p	30	28	93%
9	20201CSD0077	PENIKALAPAATI PAVAN KALYAN	p	p	p	p	p	p	P	p	A	p	p	p	p	p	p	30	28	93%
10	20201CSD0122	DISHA DEVADIGA	A	p	p	P	A	p	P	p	p	A	A	p	p	p	p	30	22	73%
11	20201COD0022	KALLURI MAHENDRANATH CHOWDARY	p	A	A	A	p	A	p	A	A	A	p	A	p	A	A	30	10	33%
12	20201CEI0007	DADA LAKSHMI CHARAN	p	A	A	P	p	p	P	a	p	p	p	p	p	p	p	30	24	80%
13	20201CEI0039	KATIPALLY YASHWANTH REDDY	p	P	p	A	p	p	P	p	p	p	A	p	P	A	P	30	24	80%
14	20201CSE0167	N HEMANTH REDDY	A	A	A	p	p	p	a	a	a	p	A	A	p	A	A	30	10	33%
15	20201ECE0047	Chakali Babu Kiran	p	P	A	p	p	p	a	p	p	p	p	p	P	A	P	30	24	80%
16	20201CIT0033	Koppuravuri kavya	p	P	p	p	p	p	p	A	p	p	p	p	p	p	p	30	28	93%

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Presidency University, Bengaluru
Value Added Course Marksheet
School of Engineering

Course Code :	PHY V 008	Academic Year :	2020-21
Course Name :	NANOSTRUCTURED MATERIALS	Semester :	Even Semester
		Instructor-in-Charge Name :	Dr. Anindita B
		Instructor-in-Charge Employee ID :	PUNIV01030

S. No	UID No	Roll No	Name	School (e.g. SoE/SoL etc)	Attendance (in %)	Marks	Eligible for Certificate (Y/N)	Remark
1	2.0201E+11	20201CCS0002	DASARI KARTHIJA	SOE	93	87	Y	NIL
2	2.0201E+11	20201CIT0107	ADITYA MISHRA	SOE	87	85	Y	NIL
3	2.0201E+11	20201CSE0274	Arjun R	SOE	93	90	Y	NIL
4	2.0201E+11	20201CSE0249	k Sudheer Kumar	SOE	80	70	Y	NIL
5	2.0201E+11	20201CST0172	B DHEERAJ	SOE	73	69	Y	NIL
6	2.0201E+11	20201CST0007	THONDAMANATI CHANDANA SRI	SOE	87	79	Y	NIL
7	2.0201E+11	20201CSE0107	Nikhil Singh	SOE	87	92	Y	NIL
8	2.0201E+11	20201ECE0118	S CHAITHANYA KUMAR REDDY	SOE	93	83	Y	NIL
9	2.0201E+11	20201CSD0077	PENIKALAPAATI PAVAN KALYAN	SOE	93	89	Y	NIL
10	2.0201E+11	20201CSD0122	DISHA DEVADIGA	SOE	73	66	Y	NIL
11	2.0201E+11	20201COD0022	KALLURI MAHENDRANATH CHOWDARY	SOE	33	23	N	NIL
12	2.0201E+11	20201CEI0007	DADA LAKSHMI CHARAN	SOE	80	75	Y	NIL
13	2.0201E+11	20201CEI0039	KATIPALLY YASHWANTH REDDY	SOE	80	79	Y	NIL
14	2.0201E+11	20201CSE0167	N HEMANTH REDDY	SOE	33	18	N	NIL
15	2.0201E+11	20201ECE0047	Chakali Babu Kiran	SOE	80	84	Y	NIL

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16	2.0201E+11	20201CIT0033	Koppuravuri kavya	SOE	93	89	Y	

Department of Physics
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Signature of HoD

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PRESIDENCY UNIVERSITY

(Established under the Presidency University Act, 2013 of the Karnataka Act 41 of 2013)

Name of the School: SOE

Name of the Department: Physics

Area of Specialization: Materials Science

Name of the Faculty Member: Dr.G Srinivas Reddy

Title of the Value Added Course: Structure of Materials

Course Duration: [30 hours] [01-09-2020 to 28-12-2020]

Course Code: PHYV011

Introduction to the Course:

The main objective of the course to give comprehensive exposure to the students regarding various engineering materials; crystalline, non- crystalline materials, crystal structure and their defects; the concept of phase and different type of phase diagrams.

Course Outcomes: On successful completion of the course the students shall be able to :

1. Differentiate between different type of materials, and their structures.

2. Explain the structural dependence of properties

3. Explains the role of crystal structure in various properties: Mechanical, Thermal and ionic conductivity

Course Content (Syllabus):

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Module:1: Introduction: Materials Classification: Engineering materials and their classification: metals/ceramics/composites, Intrinsic and extrinsic, Structure sensitive and Structure insensitive properties. Structure-property-processing co-relationship as a theme of materials science.

[10 Hrs] [Blooms level selected: Knowledge]

Module: 2: Crystal Imperfections: Point imperfections, Burger vector, Dislocations (edge and screw) Properties of dislocation, Generation of dislocation, Partial dislocation, Stacking faults, Motion of dislocations (climb, cross-slip), Strain hardening and recovery, and Surface imperfections, Structure of high, Low angle and twin boundaries, introduction to phase diagrams.

[12 Hrs] [Blooms level selected: Comprehension]

Module: 3: Thermal Properties: Lattice vibrations, vibrations of simple lattice-optical and acoustic phonons, Heat capacity, Thermal expansion.

Mechanical Behavior of Materials: Elastic, inelastic viscoelastic properties, stress-strain relation

Optical Behavior: Interaction of radiation with matter (metals and non-metals)

[08 Hrs] [Blooms level selected: Application]

References

1. Smallman, R.E., and Bishop, R.J., Metals and Materials, Butterworth-Heinemann, Oxford University Press, (1995).
2. Raghvan, V., Materials Science & Engineering, Prentice-Hall of India, (1998).
3. Callister, W.D., Materials Science & Engineering: An Introduction, Wiley & Sons, (2001).
4. Smith, W., Principles of Materials Science and Engineering., McGraw Hill, (1990).

Approval by the HOD.

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Presidency University, Bengaluru

Department of Physics

School of Engineering

VAC DETAILS

Total number of hours:30

Value added Course(VAC) Name and Code:PHYV011

Name of the Instructor: Dr G Srinivas Reddy

NOTE:1. If 1 or more classes are engaged on same day. Then change timings by repeating date

2. Enter date and timings according to the VAC class engaged

S.No.	STUDENT ID NO	STUDENT NAME	12/7/21	14/7/21	15/7/21	16/7/21	19/7/21	20/7/21	22/7/21	26/7/21	28/7/21	29/7/21	30/7/21	2/8/21	3/8/21	4/8/21	5/8/21	Total classes conducted	Total classes attended	Percentage attended
			5 -7 PM	5-7 PM	5-7PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM	5-7 PM			
1	20201CSE0778	ANAS AHMED	p	A	p	p	p	p	p	A	p	p	p	p	A	p	A	30	22	73%
2	20201CST0019	Y RAGHAVA HARSHAVARDHAN REDDY	p	A	p	p	p	p	p	A	p	p	p	p	A	p	A	30	22	73%
3	20201CCS0046	K.REHAN .	p	P	p	p	p	p	p	p	p	p	p	p	P	p	P	30	30	100%
4	20201CSE0350	MODUPALLI DINESH	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	30	30	100%
5	20201COD0041	DODDA JAGADEESH REDDY	p	p	p	p	p	p	p	A	a	p	p	p	p	p	p	30	26	87%
6	20201CSE0211	Rashi .	p	p	p	p	p	p	p	a	a	p	p	p	p	p	p	30	26	87%
7	**20201CBD0043**	**NAFISA FATHIMA**	p	p	p	p	p	p	p	P	p	p	p	p	p	p	p	30	30	100%
8	**20201ISB0026**	**Rahul S**	A	p	p	p	p	p	A	a	p	p	p	p	p	p	p	30	24	80%
9	20201CSE0497	VEERESH PATIL	p	p	p	p	p	p	A	p	p	p	p	p	p	p	p	30	28	93%
10	20201CSE0620	BACHU MANIKANTESWARA REDDY	A	p	p	A	A	p	P	a	p	A	A	p	p	p	p	30	18	60%
11	20201CIT0009	VINAY KUMAR M	p	p	p	A	p	A	a	p	p	A	p	A	p	p	p	30	20	67%
12	20201EEE0017	DHANUSH A S	p	A	A	P	p	p	a	a	p	P	p	p	A	A	A	30	16	53%
13	20201IST0022	SANJANA KASHIMATA M	p	P	p	p	p	p	P	p	p	p	p	p	P	p	P	30	30	100%
14	20201ECE0230	TEJAS P	A	A	p	p	p	p	a	a	a	p	p	p	A	p	A	30	16	53%
15	20201CSE0363	Mohammed Ahmed	p	P	A	p	p	p	a	p	a	p	p	p	P	A	P	30	22	73%
16	20201ECE0080	C UMESH CHANDRA	p	p	A	p	p	p	P	p	p	p	p	p	p	A	p	30	26	87%
17	20201CST0047	MEENIGA MAHENDRA	p	p	A	p	p	A	a	p	p	p	p	A	p	A	p	30	20	67%

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Presidency University, Bengaluru
Value Added Course Marksheet
School of Engineering

Course Code :	PHYV011	Academic Year :	2020-21
Course Name :	Structure of Materials	Semester :	Even Semester
		Instructor-in-Charge Name :	Dr G Srinivas Reddy
		Instructor-in-Charge Employee ID :	Dr G Srinivas Reddy

S. No	UID No	Roll No	Name	School (e.g. SoE/SoL etc)	Attendance (in %)	Marks	Eligible for Certificate (Y/N)	Remark
1		20201CSE0778	ANAS AHMED	SOE	73%	60	Y	NIL
2		20201CST0019	Y RAGHAVA HARSHAVARDHAN REDDY	SOE	73%	65	Y	NIL
3		20201CCS0046	K.REHAN .	SOE	100%	78	Y	NIL
4		20201CSE0350	MODUPALLI DINESH	SOE	100%	70	Y	NIL
5		20201COD0041	DODDA JAGADEESH REDDY	SOE	87%	60	Y	NIL
6		20201CSE0211	Rashi .	SOE	87%	65	Y	NIL
7		20201CBD0043	NAFISA FATHIMA	SOE	100%	43	Y	NIL
8		20201ISB0026	Rahul S	SOE	80%	30	N	NIL
9		20201CSE0497	VEERESH PATIL	SOE	93%	60	Y	NIL
10		20201CSE0620	BACHU MANIKANTESWARA REDDY	SOE	60%	31	N	NIL
11		20201CIT0009	VINAY KUMAR M	SOE	67%	34	N	NIL
12		20201EEE0017	DHANUSH A S	SOE	53%	67	Y	NIL
13		20201IST0022	SANJANA KASHIMATA M	SOE	100%	68	Y	NIL
14		20201ECE0230	TEJAS P	SOE	53%	28	N	NIL
15		20201CSE0363	Mohammed Ahmed	SOE	73%	56	Y	NIL

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16		20201ECE0080	C UMESH CHANDRA	SOE	87%	62	Y	NIL
17		20201CST0047	MEENIGA MAHENDRA	SOE	67%	57	Y	NIL

Department of Physics
School of Engineering
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Signature of HoD

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PRESIDENCY UNIVERSITY

GAIN MORE KNOWLEDGE
REACH GREATER HEIGHTS

(Established under the Presidency University Act, 2013 of the Karnataka Act 41 of 2013)

Name of the School: Engineering

Name of the Department: Physics

Area of Specialization: Material Science

Name of the Faculty Member(s): Dr. Deepthi P R

Title of the Value Added Course: Origin- Scientific Graphing and Data Analysis

Course Code: PHY V 013

Course Duration: 30 hours [From Feb 1 to Mar 20 2022]

Introduction to the Course: Origin is the data analysis and graphing software of choice for over half a million scientists and engineers in commercial industries, academia, and government laboratories worldwide. Origin offers an easy-to-use interface for beginners, combined with the ability to perform advanced customization as you become more familiar with the application. Origin graphs and analysis results can automatically update on data or parameter change, allowing you to create templates for repetitive tasks or to perform batch operations from the user interface, without the need for programming. This course is also intended to give students a more complete picture of different types of graphs and their uses.

Course Outcomes: On successful completion of the course the students shall be able to:

1. Identify types of graphs.
2. Add, arrange, resize and link Layers.

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3. Plot linear fit graphs and calculate the slope.
4. Plot 3D graphs.

Course Content: This course will give an introduction to graphs and analysis. This course is also intended to give students a more complete knowledge of the types of graphs and charts such as line graphs, scatter plot, pie diagrams, bar charts, columns, multiple Y graphs, among others. Various types of curve fitting such as linear, binomial, polynomial fit, etc. Labelling of graphs and error representations in box and whisker plot, bar charts, scatter plots, etc.

Approval by the HOD

Department of Physics
School of Engineering
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Presidency University, Bengaluru

Department of Physics

School of Engineering

NOTE:1. If 1 or more classes are engaged on same day. Then change timings by repeating date

2. Enter date and timings according to the VAC class engaged

VAC DETAILS

Total number of hours:30

Value added Course (VAC) Name and Code:Origin- Scientific Graphing and Data Analysis PHY V 013

Name of the Instructor: Dr Deepthi P R

S.No.	STUDENT ID NO	STUDENT NAME	01-03-2021	02-03-2021	03-03-2021	06-03-2021	06-03-2021	07-03-2021	07-03-2021	08-03-2021	09-03-2021	10-03-2021	13-03-2021	13-03-2021	14-03-2021	17-03-2021	18-03-2021	19-03-2021	20-03-2021	20-03-2021	21-03-2021	25-03-2021	27-03-2021	27-03-2021	03-04-2021	03-04-2021	10-04-2021	10-04-2021	11-04-2021	12-04-2021	17-04-2021	17-04-2021	Total classes conducted	Total classes attended	Percentage attended
			7 to 8	7 to 8	7 to 8	2 to 3	3 to 4	3 to 4	4 to 5	7 to 8	7 to 8	7 to 8	2 to 3	3 to 4	2 to 3	7 to 8	7 to 8	7 to 8	9.30 to10.30	3 to 4	2 to 3	7 to 8	9 to 10	3 to 4	9 to 10	3 to 4	9 to 10	3 to 4	2 to 3	7 to 8	10 to 11	2 to 3			
1	20201CIT0104	MUNESH KUMAR B N	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	A	P	A	P	A	P	P	A	30	25	83.33
2	20201CIT0106	ADARSH KUMAR MAHTO	P	P	P	A	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	A	P	P	A	A	P	30	24	80.00
3	20201CIT0108	ANKITH SHARMA M	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	30	100.00
4	20201CIT0110	DARSHITHA M	A	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	30	27	90.00
5	20201CIT0111	SYED ABDUL AZEEM	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	30	100.00
6	20201CIT0114	ANDE HARSHAVARDHAN	A	A	A	A	P	P	P	P	P	A	A	A	P	P	A	A	P	A	P	A	A	P	A	P	A	P	P	A	P	P	30	15	50.00
7	20201CIV0039	JASPREET SINGH	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	30	28	93.33
8	20201CIV0040	SAI GANESH BALLARY	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	A	P	30	28	93.33
9	20201CIV0041	ANUP P MALGE	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	30	100.00
10	20201COM0048	MAAZ AHMED BINTHURI	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	A	P	P	P	P	30	27	90.00
11	20201COM0049	NEHA THOMAS	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	A	A	30	27	90.00
12	20201COM0051	ROHINI N	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	30	100.00
13	20201COM0052	MAZAHIR K NAJMI	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	A	P	A	30	26	86.67
14	20201COM0053	CHATUR S	P	P	P	P	A	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	28	93.33
15	20201COM0054	AMAN KUMAR	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	29	96.67

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Presidency University, Bengaluru
Value Added Course Marksheet
School of Engineering

Course Code :	PHY V 013	Academic Year :	2020-2021
Course Name :	Origin- Scientific Graphing and Data Analysis	Semester :	Even Semester
		Instructor-in-Charge Name :	Dr Deepthi P R
		Instructor-in-Charge Employee ID :	PUNIV00021

S. No	UID No	Roll No	Name	School (e.g. SoE/SoL etc)	Attendance (in %)	Marks	Eligible for Certificate (Y/N)	Remark
1		20201CIT0104	MUNESH KUMAR B N	SoE	83.33	73	Y	NIL
2		20201CIT0106	ADARSH KUMAR MAHTO	SoE	80.00	75	Y	NIL
3		20201CIT0108	ANKITH SHARMA M	SoE	100.00	81	Y	NIL
4		20201CIT0110	DARSHITHA M	SoE	90.00	71	Y	NIL
5		20201CIT0111	SYED ABDUL AZEEM	SoE	100.00	82	Y	NIL
6		20201CIT0114	ANDE HARSHAVARDHAN	SoE	50.00	AB	N	NIL
7		20201CIV0039	JASPREET SINGH	SoE	93.33	84	Y	NIL
8		20201CIV0040	SAI GANESH BALLARY	SoE	93.33	77	Y	NIL
9		20201CIV0041	ANUP P MALGE	SoE	100.00	78	Y	NIL
10		20201COM0048	MAAZ AHMED BINTHURI	SoE	90.00	78	Y	NIL
11		20201COM0049	NEHA THOMAS	SoE	90.00	88	Y	NIL
12		20201COM0051	ROHINI N	SoE	100.00	88	Y	NIL
13		20201COM0052	MAZAHIR K NAJMI	SoE	86.67	77	Y	NIL
14		20201COM0053	CHATUR S	SoE	93.33	79	Y	NIL
15		20201COM0054	AMAN KUMAR	SoE	96.67	80	Y	NIL

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School of engineering
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Rajanukunte, Yelahanka, Bengaluru -64

Signature of HoD

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GAIN MORE KNOWLEDGE
REACH GREATER HEIGHTS

(Established under the Presidency University Act, 2013 of the Karnataka Act 41 of 2013)

Name of the School: Engineering

Name of the Department: Physics

Area of Specialization: Advanced Amorphous Materials

Name of the Faculty Member(s): Dr. N Sivasankara Reddy

Title of the Value Added Course: Applications of Amorphous Materials for Engineers

Course Code: PHY V 015

Course Duration: 30 hours [From Mar 1 to Mar 2021]

Introduction to the Course: Glass, method of preparation, types of glasses and their properties. Structural properties of glasses. Glasses for optical fibers communication and Fiber drawing method. Glass ceramics for missile nose which is IR transparent, extreme durability, corrosion resistant and low thermal expansion. Glasses for CD-RW, DVD-RW, bio active glass for bone implant, wound healing, Anti-bacterial glasses, strong glasses for display panels, radiation shielding material, laser material.

Course Outcomes: On successful completion of the course the students shall be able to:

1. Understand the basic concept of amorphous materials
2. Know the different types of preparation techniques and structural characterizations of amorphous materials.
3. Apply the knowledge of amorphous materials for engineering applications.

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Course Content: Introduction to glasses, methods of preparation and their general and special properties. Structural properties of glasses in contrast to crystalline materials. Types of glasses for special engineering applications. Glass ceramics for missile nose which is IR transparent, extreme durability, corrosion resistant and low thermal expansion.

Approval by the HOD

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Presidency University, Bengaluru

Department of Physics

School of Engineering

NOTE:1. If 1 or more classes are engaged on same day. Then change timings by repeating date

2. Enter date and timings according to the VAC class engaged

VAC DETAILS

Total number of hours:15

Value added Course(VAC) Name and Code: Advanced Amorphous Materials

Name of the Instructor: Dr N Sivasankara Reddy

S.No.	STUDENT ID NO	STUDENT NAME	1/3/21	1/3/21	2/3/21	2/3/21	3/3/21	3/3/21	4/3/21	4/3/21	5/3/21	5/3/21	6/3/21	6/3/21	7/3/21	7/3/21	8/3/21	9/3/21	9/3/21	10/3/21	11/3/21	12/3/21	13/3/21	14/3/21	15/3/21	16/3/21	17/3/21	18/3/21	21/3/21	22/3/21	124/3/21	28/3/21	Total classes conducted	Total classes attended	Percentage attended
			5 to 6 PM	6 to 7 PM	5 to 6 PM	6 to 7 PM	5 to 6 PM	6 to 7 PM	5 to 6 PM	6 to 7 PM	5 to 6 PM	6 to 7 PM	5 to 6 PM	6 to 7 PM	5 to 6 PM	6 to 7 PM	5 to 6 PM	6 to 7 PM	5 to 6 PM	6 to 7 PM	5 to 6 PM	5 to 6 PM	5 to 6 PM	5 to 6 PM	5 to 6 PM	5 to 6 PM	5 to 6 PM	5 to 6 PM	5 to 6 PM	5 to 6 PM	5 to 6 PM	5 to 6 PM			
1	20201CSD0162	SHARATH PD	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	30	28	93
2	20201CSD0163	SHILPASHREE M.R	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	30	29	97
3	20201CSG0024	HARSHITH A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	A	P	P	A	P	30	27	90
4	20201CSG0030	SURAJ KUMAR TRIPATHY	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	30	100
5	20201CSG0027	PRAMOD N	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	30	100
6	20201CSG0026	PRAJWAL P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	30	29	97
7	20201CSG0025	JAYANTH S R	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	30	29	97
8	20201CSG0021	AFSA HOORIYA	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	A	P	P	P	30	28	93
9	20201CSG0023	GAGAN GANAPATHY B B	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	A	P	A	P	P	P	P	P	P	P	30	27	90
10	20201CSG0028	SAHANA GOWDA K R	P	P	P	P	P	P	P	P	A	P	P	P	P	P	A	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	30	27	90
11	20201CSG0022	CHAITHRA N Y	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	29	97
12	20201CSE0625	DISHA R	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	30	100
13	20201CSE0613	NIKHIL KUMAR	P	P	P	P	P	P	P	P	A	A	P	P	P	A	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	26	87
14	20201CSE0614	ASHUTOSH RANJAN	P	A	A	P	P	P	P	P	P	P	A	A	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	25	83
15	20201CSE0615	ISAHAQ ABDULLAH	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	A	P	P	A	P	P	P	30	27	90

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Value Added Course Marksheet

School of Engineering

Course Code :	PHYV015	Academic Year :	2020-21
Course Name :	Advanced Amorphous Materials	Semester :	Even
		Instructor-in-Charge Name :	Dr N Sivasankara Reddy
		Instructor-in-Charge Employee ID	PUNIV00473

S. No	UID No	Roll No	Name	School (e.g. SoE/SoL etc)	Attendance (in %)	Marks	Eligible for Certificate (Y/N)	Remark
1	20201CSD0162	20201CSD0162	SHARATH PD	SoE	93	66	Y	Students were motivated
2	20201CSD0163	20201CSD0163	SHILPASHREE M.R	SoE	97	75	Y	Students were motivated
3	20201CSG0024	20201CSG0024	HARSHITH A	SoE	90	88	Y	Students were motivated
4	20201CSG0030	20201CSG0030	SURAJ KUMAR TRIPATHY	SoE	100	78	Y	Students were motivated
5	20201CSG0027	20201CSG0027	PRAMOD N	SoE	100	93	Y	Students were motivated
6	20201CSG0026	20201CSG0026	PRAJWAL P	SoE	97	88	Y	Students were motivated
7	20201CSG0025	20201CSG0025	JAYANTH S R	SoE	97	87	Y	Students were motivated
8	20201CSG0021	20201CSG0021	AFSA HOORIYA	SoE	93	68	Y	Students were motivated
9	20201CSG0023	20201CSG0023	GAGAN GANAPATHY B B	SoE	90	79	Y	Students were motivated
10	20201CSG0028	20201CSG0028	SAHANA GOWDA K R	SoE	90	67	Y	Students were motivated
11	20201CSG0022	20201CSG0022	CHAITHRA N Y	SoE	97	87	Y	Students were motivated
12	20201CSE0625	20201CSE0625	DISHA R	SoE	100	88	Y	Students were motivated
13	20201CSE0613	20201CSE0613	NIKHIL KUMAR	SoE	87	88	Y	Students were motivated
14	20201CSE0614	20201CSE0614	ASHUTOSH RANJAN	SoE	83	82	Y	Students were motivated
15	20201CSE0615	20201CSE0615	ISAHAQ ABDULLAH	SoE	90	85	Y	Students were motivated

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