



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

www.sathyabama.ac.in

SCHOOL OF SCIENCE AND HUMANITIES

DEPARTMENT OF PHYSICS

Academic Year – 2022 – 2023

1.3.2 Number of value-added courses for imparting transferable and life skills offered during the year

S. No.	Title	Dates
1	Utilization of solar energy	1.8.2022 to 21.8.2022
2	Computer web applications and graphics lab	3.10.2022 to 21.10.2022
3	Radiology and Safety	2.1.2023 to 21.1.2023



SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE
www.sathyabama.ac.in

1. UTILISATION OF SOLAR ENERGY



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

[Deemed to be University]

Accredited by NAAC, approved by AICTE



**School of Science and Humanities,
Department of Physics**

Organises

Certificate Course on – Utilisation of Solar Energy

1 To 21 August 2022

CHIEF PATRONS

**Dr. Mariazeena Johnson,
Chancellor, SIST**

**Mrs. J. Maria Bernadette
Tamilarasi**

**Dr. Marie Johnson,
President, SIST**

**Mr. J. Arul Selvam
Vice Presidents, SIST**

PATRON

Dr. T. Sasipraba, Vice-Chancellor, SIST

Organized by

Prof. Dr. S. Ravichandran
Head, Department of Physics

Convenor

Dr. P. Malliga
Associate Professor
Department of Physics

Registration Link :

<https://forms.gle/Kzka7KNCiYCyVgGdA>

Free Registration

E- Certificates will be provided



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

www.sathyabama.ac.in

Objective of the Course:

After the successful completion of the course, the student shall be able to:

Research in the field

- Marketing aspects of solar cell
- Conceptualize and create a new product
- Encourage journal publications
- Gear them toward research activities

Schedule:

S. No.	Resource Person	Topics Covered	Date	Duration
1	Dr.S. Ravichandran	Introduction to solar energy	01-08-2022 - 03-08-2022	3 hrs
2	Dr.S. Anandhi	Basics of solar energy & Black Body Radiation	01-08-2022 - 03-08-2022	3 hrs
3	Dr. Anita Lett	Origin of Solar Energy	04-08-2022 - 08-08-2022	3 hrs
4	Dr.C.Rameshkumar	Properties of Solar Energy.	04-08-2022 - 08-08-2022	3 hrs
5	Dr.D.S.Jayalakshmi	Interaction of solar energy with atmosphere	09-08-2022 - 11-09-2022	3 hrs
6	Dr.P.Malliga	Formation and Structure of Solar Cells	09-08-2022 - 11-09-2022	3 hrs
7	Dr.M.Manjula	Types of Solar Cells	12-08-2022 - 17-08-2022	3 hrs
8	Dr.Anita Lett	Solar Energy Storage	12-08-2022 - 17-08-2022	3 hrs
9	Dr. Ravichandran	Guidelines for Solar Energy Usage	18-08-2022 - 21-08-2022	3 hrs
10	Dr. Anandhi	Solar Applications	18-08-2022 - 21-08-2022	3 hrs

Course Content:

S. No.	Topic covered	Syllabus	Duration
1	Introduction to solar energy.	The role of energy in economic development	3 hrs
2	Basics of solar energy & Black Body Radiation	Brief History of solar energy utilization- Planck's formula in wavelength unit - Wien displacement law - Stefan - Boltzmann law- Photoelectric effect - Einstein's theory of photons -Einstein's derivation of the black-body formula.	3 hrs
3	Origin of Solar Energy	Basic parameters of the Sun - Measurement of the solar constant - The structure of the Sun – The origin of solar energy - solar window- atmospheric effects- diffused radiations- Air mass-effect of Air Mass	3 hrs



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

www.sathyabama.ac.in

4	Properties of Solar Energy.	Rotation and orbital motion of the Earth around the Sun - Solar time, sidereal time - universal standard time, local standard time - Equation of time - Intensity of sunlight on an arbitrary surface at any time.	3 hrs
5	Interaction of solar energy with the atmosphere	Interaction with the atmosphere - Absorption of the molecules – Air mass - Rayleigh scattering - Direct and scattered sunlight.	3 hrs
6	Formation and Structure of Solar Cells	Formation of a PN – junction - Space charge and internal field – Quasi-Fermi levels - The Shockley diode equation - Structure of a solar cell - The solar cell equation - Fill factor and maximum power - Various electron - hole-pair recombination mechanisms	3 hrs
7	Types of Solar Cells	Crystalline silicon solar cells - Thin film solar cells: CIGS, Cite, and a – silicon - Tandem solar cells – Dye-sensitized solar cells - Organic solar cells	3 hrs
8	Solar Energy Storage	The necessity of storage for solar energy- Chemical energy storage - Thermal energy storage – Thermal Flywheels - Compressed air- Solar thermal electricity using Stirling engine or Ranking engine - Solar photovoltaics with concentration	3 hrs
9	Guidelines for Solar Energy Usage	Need of Earthing- regulation on earthing tools and their uses- Electrical safety- electrical safety rules- simple first aid- general safety of tools and equipment- fire extinguishers- types of fire extinguishers-Guideline of Safety measurement in solar plant	3 hrs
10	Solar Applications	solar water heating system - advantages and disadvantages - Solar Lantern- street light-home light- solar cooking- Rooftop Solar system - Rooftop Solar Programme by Government of India and Objectives of the Programme.	3 hrs

Course Outcome:

After the successful completion of the course, the student shall be able to:

1. Understand the physical significance of solar energy and the relation of Einstein's derivation
2. Apply the Basic parameter of solar energy in tracking sunlight to calculate the atmospheric interaction



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

www.sathyabama.ac.in

3. Explain the basic physics behind radiation and solar energy collecting devices in detail.
4. Classify the type of energy storage system and implement the safety measurements in installing the energy storage system
5. Acquire relative information on Energy storage applications in diverse aspects

List of Participants					
S. No.	Name		S. No.	Name	
1.	ANANDHI S	III B.Sc., Physics	24.	JESSICA A	II M.Sc., Physics
2.	GOMATHI D	III B.Sc., Physics	25.	J KAVITHA	II M.Sc., Physics
3.	HARIS KUMAR N	III B.Sc., Physics	26.	KEERTHANA PRIYA G	II M.Sc., Physics
4.	BELLAM HARSH	III B.Sc., Physics	27.	LOKESHWARI G	II M.Sc., Physics
5.	MADHAVI P	III B.Sc., Physics	28.	MANISHA S	II M.Sc., Physics
6.	MANOJ R	III B.Sc., Physics	29.	NILA K	II M.Sc., Physics
7.	PANDIMEENA S	III B.Sc., Physics	30.	PRIYADHARSHINI C	II M.Sc., Physics
8.	PREMALATHA N	III B.Sc., Physics	31.	RAJESH R	II M.Sc., Physics
9.	SAMINA S	III B.Sc., Physics	32.	SAARWIN S S	II M.Sc., Physics
10.	SANJAY S	III B.Sc., Physics	33.	SANTHOSH D	II M.Sc., Physics
11.	SETH SORENG	III B.Sc., Physics	34.	SARANYA K	II M.Sc., Physics
12.	SHARMILA A	III B.Sc., Physics	35.	S.SIVARAMALAKSHMI	II M.Sc., Physics
13.	SRIVANI V	III B.Sc., Physics	36.	SRIPRIYA R R	II M.Sc., Physics
14.	SWATHI BALASUBRAMANIAM	III B.Sc., Physics	37.	STALIN MARIVALAN R	II M.Sc., Physics
15.	TAMILARASI K	III B.Sc., Physics	38.	SUNDARESAN M	II M.Sc., Physics
16.	VIJAYAN B	III B.Sc., Physics	39.	TAMILARASAN P	II M.Sc., Physics
17.	ANITHA A	II M.Sc., Physics	40.	THENMOZHI L	II M.Sc., Physics
18.	AUXILIA V	II M.Sc., Physics	41.	S.VAISHALI	II M.Sc., Physics
19.	DHARSHINI V	II M.Sc., Physics	42.	VENIS MANO J	II M.Sc., Physics
20.	DIVYA D	II M.Sc., Physics	43.	M.R.YOGAJOTHIESHWAAN	II M.Sc., Physics
21.	DIVYALAKSHMI S	II M.Sc., Physics			
22.	JEMIMA T	II M.Sc., Physics			
23.	JENOLIN SHALOM S	II M.Sc., Physics			



SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

www.sathyabama.ac.in

Certificate (Sample)

SATHYABAMA
INSTITUTE OF SCIENCE AND TECHNOLOGY
Department of Physics

Certificate of Participation

This is to certify that **Mr. B. Vijayan, II B.Sc. Physics** is awarded for his participation in the course on **"Utilisation of Solar Energy"** conducted on **1-25, August 2022** organised by Department of Physics, Sathyabama Institute of Science and Technology, Chennai

P. Sulliga
Co-ordinator
Asso. Prof./Physics

Dr. S. Ravichandran
Head / Department of Physics



SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

www.sathyabama.ac.in

2. COMPUTER WEB APPLICATIONS AND GRAPHIC



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

DEEMED TO BE UNIVERSITY
ACCREDITED WITH NAAC A BY NBA

Department of Physics

Organizes

**Certificate Course on
On**

Computer Web applications and Graphics

from October 3 to 21, 2021

CHIEF PATRONS

Dr. Mariazeena Johnson
Chancellor

Dr. Marie Johnson
President

Mrs. J. Maria Bernadette Tamilarasi
Vice Presidents, SIST

Mr. J. Arul Selvam

PATRON

Dr. T. Sasipraba
Vice-Chancellor

Convenors:

Dr. S. Murugesan, Asso. Prof.,
Dr. J. Anita Lett, Ass. Pro.
Dr. S. Anandhi, Ass. Prof.,

Organizer:

Prof. S. Ravichandran,
Head – Department of Physics
Dr. K. Gobi Saravanan,
Scientist, IRC

Click here to Register :

<https://forms.gle/HfEzATVjN4onCbg37>



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

www.sathyabama.ac.in

Course Objectives:

After the successful completion of the course, the student shall be able to:

Research in the field of

- Marketing aspects of web designing
- Interdisciplinary studies in computer applications
- Conceptualize and create a new product
- Encourage journal publications
- Gear them toward research activities

Course Content:

S. No.	Topic covered	Syllabus	Duration
1	Web based applications	Introduction to the Internet and World Wide Web, Fundamentals of Hyper Text Markup Language (HTML), Cascading Style Sheets (CSS)	3 hrs
2	Web based applications	Client-side programming using JavaScript, Fundamentals of Extensible Markup Language (XML).	3 hrs
3	Introduction to Computer Graphics	Basic of Computer Graphics, Applications of computer graphics, Display devices	3 hrs
4	Introduction to Computer Graphics	Random and Raster scan systems, Graphics input devices, Graphics software and standards.	3 hrs
5	Graphics Primitives	Points, lines, circles and ellipses as primitives, scan conversion algorithms for primitives, Fill area primitives including scan-line polygon filling	3 hrs
6	Graphics Primitives	inside-outside test, boundary and flood-fill, character generation, line attributes, area-fill attributes, character attributers	3 hrs
7	2D transformation and viewing	Transformations (translation, rotation, scaling), matrix representation, homogeneous coordinates, composite transformations, reflection and shearing, viewing pipeline and coordinates system	3 hrs
8	2D transformation and viewing	window-to-viewport transformation, clipping including point clipping, line clipping (cohen-sutherland, liang- bersky, NLN), polygon clipping	3 hrs
9	3D transformation and viewing	3D scaling, rotation and translation, composite transformation, viewing pipeline and coordinates, parallel and perspective transformation	3 hrs
10	3D transformation and viewing	view volume and general (parallel and perspective) projection transformations	3 hrs



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

www.sathyabama.ac.in

Course Schedule:

S. No.	Name of the staff	Topics Covered	Date	Duration
1	Dr.S. Ravichandran	Web based applications	03-10-2022 to 05-10-2022	3 hrs
2	Dr.S. Anandhi	Web based applications	03-10-2022 to 05-10-2022	3 hrs
3	Dr. Anita Lett	Introduction to Computer Graphics	06-10-2022 to 10-10-2022	3 hrs
4	Dr.C.Rameshkumar	Introduction to Computer Graphics	06-10-2022 to 10-10-2022	3 hrs
5	Dr.D.S.Jayalakshmi	Graphics Primitives	11-10-2022 to 13-10-2022	3 hrs
6	Dr.P.Malliga	Graphics Primitives	11-10-2022 to 13-10-2022	3 hrs
7	Dr.M.Manjula	2D transformation and viewing	14-10-2022 to 18-10-2022	3 hrs
8	Dr.Anita Lett	2D transformation and viewing	14-10-2022 to 18-10-2022	3 hrs
9	Dr. Ravichandran	3D transformation and viewing	19-10-2022 to 21-10-2022	3 hrs
10	Dr. Anandhi	3D transformation and viewing	19-10-2022 to 21-10-2022	3 hrs

List of Participants

S. No.	Name	Class	S. No.	Name	Class
1.	ANANDHI S	III B.Sc., Physics	24.	JOTHIKA R	I M.Sc., Physics
2.	GOMATHI D	II B.Sc., Physics	25.	KEERTHANA S N	I M.Sc., Physics
3.	HARIS KUMAR N	III B.Sc., Physics	26.	KIRTHIKA M	I M.Sc., Physics
4.	BELLAM HARSH	III B.Sc., Physics	27.	MARIA INFANT M	I M.Sc., Physics
5.	MADHAVI P	III B.Sc., Physics	28.	MARY SHAMALA V	I M.Sc., Physics
6.	MANOJ R	III B.Sc., Physics	29.	PADMA PRIYA B	I M.Sc., Physics
7.	PANDIMEENA S	III B.Sc., Physics	30.	PRATHYUSHA S Y	I M.Sc., Physics
8.	PREMALATHA N	III B.Sc., Physics	31.	SANGEETHA V	I M.Sc., Physics
9.	SAMINA S	III B.Sc., Physics	32.	SASHMITHAN A	I M.Sc., Physics
10.	SANJAY S	III B.Sc., Physics	33.	SHALINI T	I M.Sc., Physics
11.	SETH SORENG	III B.Sc., Physics	34.	SUBRAMANIAN S M	I M.Sc., Physics
12.	SHARMILA A	III B.Sc., Physics	35.	SUDHAKAR S	I M.Sc., Physics
13.	SRIVANI V	III B.Sc., Physics	36.	TAMILSELVAN J	I M.Sc., Physics
14.	SWATHI BALASUBRAMANIAM	III B.Sc., Physics	37.	THARANI M	I M.Sc., Physics
15.	TAMILARASI K	III B.Sc., Physics	38.	VARALAKSHMI VASUDHA	I M.Sc., Physics
16.	VIJAYAN B	III B.Sc., Physics	39.	VISHAL R G	I M.Sc., Physics
17.	ANURADHA SHARMA	I M.Sc., Physics	40.	YAZHINI J K	I M.Sc., Physics
18.	ARCHANA K L	I M.Sc., Physics	41.	YOGESHWARAN A	I M.Sc., Physics
19.	BHUVANESHUWARI B	I M.Sc., Physics	42.	YUKESH M	I M.Sc., Physics
20.	DIVYABHARATHI S	I M.Sc., Physics			
21.	DURGADEVI G	I M.Sc., Physics			
22.	HEMAMALINI P	I M.Sc., Physics			
23.	IMMANUEL WESLY U	I M.Sc., Physics			



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

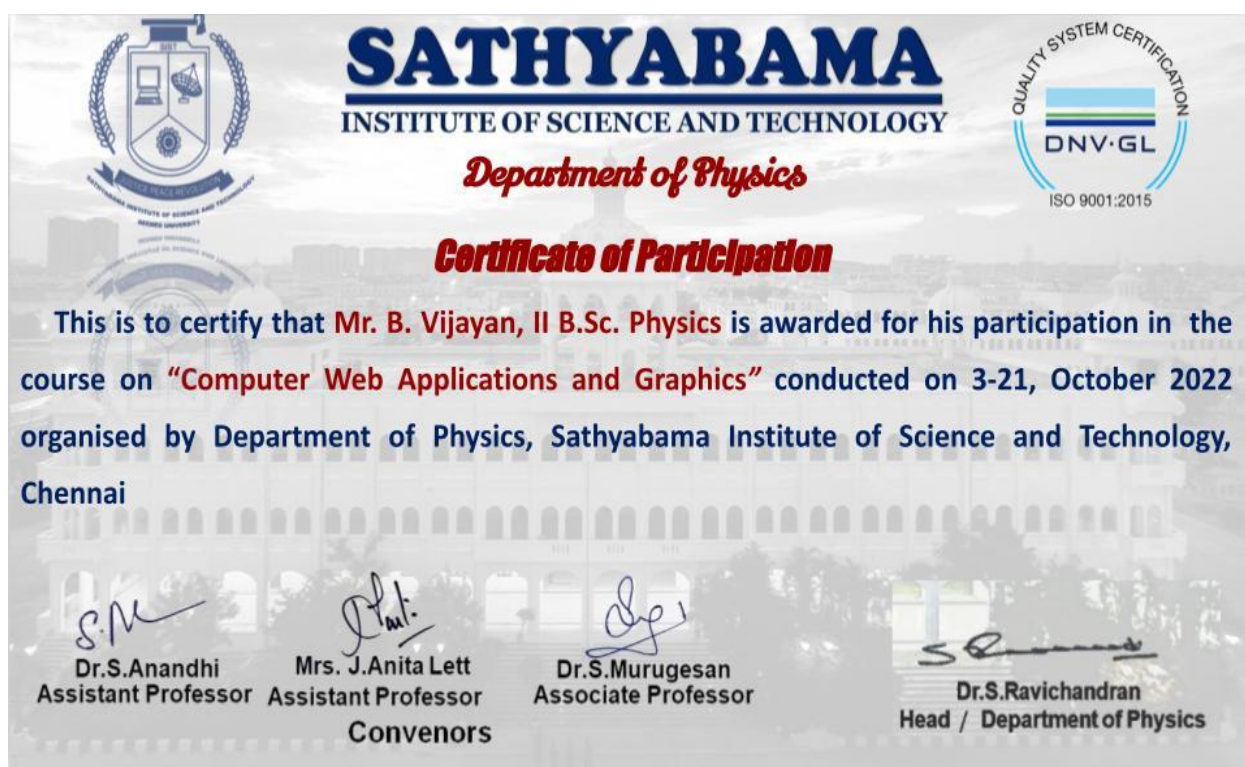
www.sathyabama.ac.in

Course Outcome:

After learning the course, the students should be able to:

1. To understand the various computer graphics hardware and display technologies.
2. 2D and 3D viewing technologies
3. Various 2D and 3D objects transformation techniques

Certificate (Sample):





SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE
www.sathyabama.ac.in

3. ADIOLOGY AND SAFETY



SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**

ACCREDITED WITH "A" GRADE BY NAAC

APPROVED BY AICTE

School of Science and Humanities

Department of Physics

Certificate Course on

Radiology and safety

புரூயுலுஜுலு அனூ சாபேது

02 - 21 January 2023

6 - 8 PM

CHIEF PATRONS

**Dr. Mariazeena Johnson,
Chancellor, SIST**

**Dr. Marie Johnson,
President, SIST**

**Mrs. J. Maria
Bernadette Tamilarasi**

**Mr. J. Arul Selvam
Vice Presidents, SIST**

PATRON

Dr. T. Sasipraba, Vice-Chancellor, SIST

Convenor:

**Dr. S. Murugesan
Associate Professor
Dr. S. Anandhi
Dr. J. Anitalett
Assistant Professor**

Organizer:

**Dr. S. Ravichandran
HOD & Professor**





SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

www.sathyabama.ac.in

Course Objectives:

- Understanding nuclear radiation and its biological effects.
- Radiation measurement, technique for detecting the intensity and characteristics of ionizing radiation, such as alpha, beta, and gamma rays
- Radiation Safety is to Prevent Harmful effects that are, in principle, preventable. Reduce the risk of cancer and heritable effects to the extent reasonably achievable.

Course Content:

S. No.	Topic covered	Syllabus	Duration
1	Radiation Quantities and Units:	Radiation- Radioactivity- Sources of radiation - natural radioactive sources -cosmic rays-terrestrial radiation - man made radiation sources. Units of radiation Exposure- Activity concentration - Absorbed dose-Equivalent Dose Weighting Factors-Effective Dose - Occupational Exposure Limits - Dose limits to public.	3 hrs
2	Biological Effects of radiation	Ionization, excitation and free radical formation, hydrolysis of water, action of radiation on cell - Chromosomal aberration and its application for the biological dosimetry- Effects of whole body and acute irradiation, dose fractionation, effects of ionizing radiation on each of major organ system including fetus.	3 hrs
3	Radiation detection	Radiation detection: Ionization of gases- Fluorescence and Phosphorescence -Effects on photographic emulsion. Ionization Chambers – proportional counters- G.M counters- scintillation detectors – liquid semiconductor detectors –	3 hrs
4	Radiation Measurements	Gamma ray spectrometer. and Measurements: secondary standard dosimeters – film dosimeter – chemical dosimeter - Thermoluminescent Dosimeter - Pocket Dosimeter-Radiation survey meter- wide range survey meter -zone monitor-contamination monitor - their principle-function and uses.	3 hrs
5	Radiation Hazard evaluation	Philosophy of Radiation protection, effects of time, Distance & Shielding. Calculation of Work load, weekly calculated dose to radiation worker & General public good work practice in Diagnostic Radiology.	3 hrs



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

www.sathyabama.ac.in

6	Radiation control	Planning consideration for radiology, including Use factor, occupancy factors, and different shielding material.	3 hrs
7	Radiation protection	Radiation protection of self and patient- Principles of radiation protection, time - distance and shielding, shielding - calculation and radiation survey –ALARA personnel dosimeters (TLD and film batches)	3 hrs
8	Occupational Exposure Guidelines	occupational exposure - ICRP, NRPB, NCRP and WHO guidelines for radiation protection, pregnancy and radiation protection. Guidance level for patient's dose reduction in radio-diagnosis.	3 hrs
9	Regulatory Requirements	International Commission on Radiation Protection (ICRP) / National Regulatory body (AERB - Atomic Energy Regulatory Board).	3 hrs
10	Radiation Responsibilities	Responsibilities, organization, Safety Standard, Codes and Guides, Responsibilities of licenses, registrants & employers and Enforcement of Regulatory requirements.	3 hrs

Course Schedule:

S. No.	Resource Person	Topics Covered	Date	Duration
1	Dr.S. Ravichandran	Radiation Quantities and Units	02-01-2023 to 04-01-2023	3 hrs
2	Dr.S. Anandhi	Biological Effects of radiation	02-01-2023 to 04-01-2023	3 hrs
3	Dr. Anita Lett	Radiation detection	05-01-2023 to 07-01-2023	3 hrs
4	Dr.C.Rameshkumar	Radiation Measurements	05-01-2023 to 07-01-2023	3 hrs
5	Dr.D.S.Jayalakshmi	Radiation Hazard evaluation	09-01-2023 to 11-09-2023	3 hrs
6	Dr.P.Malliga	Radiation control	09-01-2023 to 11-09-2023	3 hrs
7	Dr.M.Manjula	Radiation protection	12-01-2023 to 14-01-2023	3 hrs
8	Dr.Anita Lett	Occupational Exposure Guidelines	12-01-2023 to 14-01-2023	3 hrs
9	Dr. Ravichandran	Regulatory Requirements	19-01-2023 to 21-01-2023	3 hrs
10	Dr. Anandhi	Radiation Responsibilities	19-01-2023 to 21-01-2023	3 hrs



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

www.sathyabama.ac.in

List of Participants

S. No	Name	Class	S. No.	Name	Class
1.	ANITHA A	II M.Sc., Physics	25.	ANURADHA SHARMA	I M.Sc., Physics
2.	AUXILIA V	II M.Sc., Physics	26.	ARCHANA K L	I M.Sc., Physics
3.	DHARSHINI V	II M.Sc., Physics	27.	BHUVANESHWARI B	I M.Sc., Physics
4.	DIVYA D	II M.Sc., Physics	28.	DIVYABHARATHI S	I M.Sc., Physics
5.	DIVYALAKSHMI S	II M.Sc., Physics	29.	DURGADEVI G	I M.Sc., Physics
6.	JEMIMA T	II M.Sc., Physics	30.	HEMAMALINI P	I M.Sc., Physics
7.	JENOLIN SHALOM S	II M.Sc., Physics	31.	IMMANUEL WESLY U	I M.Sc., Physics
8.	JESSICA A	II M.Sc., Physics	32.	JOTHIKA R	I M.Sc., Physics
9.	J KAVITHA	II M.Sc., Physics	33.	KEERTHANA S N	I M.Sc., Physics
10.	KEERTHANA PRIYA G	II M.Sc., Physics	34.	KIRTHIKA M	I M.Sc., Physics
11.	LOKESHWARI G	II M.Sc., Physics	35.	MARIA INFANT M	I M.Sc., Physics
12.	MANISHA S	II M.Sc., Physics	36.	MARY SHAMALA V	I M.Sc., Physics
13.	NILA K	II M.Sc., Physics	37.	PADMA PRIYA B	I M.Sc., Physics
14.	PRIYADHARSHINI C	II M.Sc., Physics	38.	PRATHYUSHA S Y	I M.Sc., Physics
15.	RAJESH R	II M.Sc., Physics	39.	SANGEETHA V	I M.Sc., Physics
16.	SAARWIN S S	II M.Sc., Physics	40.	SASHMITHAN A	I M.Sc., Physics
17.	SANTHOSH D	II M.Sc., Physics	41.	SHALINI T	I M.Sc., Physics
18.	SARANYA K	II M.Sc., Physics	42.	SUBRAMANIAN S M	I M.Sc., Physics
19.	S.SIVARAMALAKSHMI	II M.Sc., Physics	43.	SUDHAKAR S	I M.Sc., Physics
20.	SRIPRIYA R R	II M.Sc., Physics	44.	TAMILSELVAN J	I M.Sc., Physics
21.	STALIN MARIVALAN R	II M.Sc., Physics	45.	THARANI M	I M.Sc., Physics
22.	SUNDARESAN M	II M.Sc., Physics	46.	VARALAKSHMI VASUDHA	I M.Sc., Physics
23.	TAMILARASAN P	II M.Sc., Physics	47.	VISHAL R G	I M.Sc., Physics
24.	THENMOZHI L	II M.Sc., Physics	48.	YAZHINI J K	I M.Sc., Physics
25.	S.VAISHALI	II M.Sc., Physics	49.	YOGESHWARAN A	I M.Sc., Physics
26.	VENIS MANO J	II M.Sc., Physics	50.	YUKESH M	I M.Sc., Physics



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

www.sathyabama.ac.in

Course Outcome:

After the successful, completion of the course, the student shall be able to:

1. The students should be able to understand
 - basic concepts in nuclear physics
 - properties of ionizing radiation
 - their applications
 - methods of radiation detection
2. Regulation of radiation practices according to internationally accepted methods.
3. Obtaining vital signs, handling equipment used for various procedures.
4. Protecting the patients, occupational workers and general public from secondary radiation.
5. Using sterilized techniques to reduce the chances of infection in work practices.

Certificate (sample):

