

SANT LONGOWAL INSTITUTE OF ENGINEERING & TECHNOLOGY
LONGOWAL, DISTT. SANGRUR
(Deemed to be University under Ministry of Education, Govt. of India)

DEPARTMENT OF PHYSICS

Ref. No. : SLIET/Phy./ 190

Dated : 16.07.2024

With reference to Ref. No. Dean (A)/235 dated 30.04.2024 regarding "*Restructuring of ICD Programmes and preparation of syllabus thereof*", Board of studies meeting was held in the department of Physics on 16.07.2024 (Tuesday) at 10:00am to finalize the syllabus along with COs & POs for Physics courses (Theory & Practical) (BSPH-103, BSPH-104, BSPH-106 and BSPH-107) for 1st and 2nd semester of ICD programme with effect from AY 2024-25 (ODD Semester).

Following BOS members were present in the meeting:

(Dr.KS Kaur)

16/7/24

(Dr. AS Dhaliwal)

16/07/24

(Dr.MM Sinha)

16/7/24

(Dr.SS Verma)

16/07/24

(Dr.P Kaur)

16/07/24

LONGOWAL INSTITUTE OF ENGINEERING & TECHNOLOGY
LONGOWAL, DISTT. SANGRUR
(Deemed to be University under Ministry of Education, Govt. of India)

(Department of Physics)

Ref. No. : SLIET/Phy./

Dated : 11.03.2024

Subject: Restructuring of ICD Programme

With reference to letter Dean (A)/3071 dated 06.03.2024, regarding finalization of the ICD program study scheme including syllabus of Physics courses (Theory and Laboratory) duly approved by the Departmental Academic Board (DAB) is hereby submitted for your kind consideration and further n/a please.

The course contents for theory and laboratory courses of Physics are designed to make these at par with the diploma courses of Physics offered by near state technical boards like Punjab Board of Technical Education, Himachal Pradesh Board of Technical Education, Haryana Board of Technical Education and Delhi Board of Technical Education.

The details of courses are as:

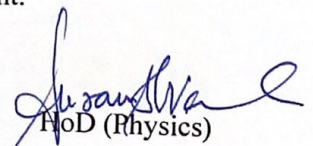
First Semester

1. BSPH-103 (Theory)
2. BSPH-107 (Lab)

Second Semester

1. BSPH-104 (Theory)
2. BSPH-106 (Lab)

The list of required equipment's and budget plan will be submitted as per demand. For the time being required equipment's for ICD labs are available in the department.


HoD (Physics)

Dean (Academics)

A comparative study of Diploma (ICD) courses towards Restructuring of ICD courses to be offered by SLIET with: Punjab State Board of Technical Education (PSBTE); Haryana State Board of Technical Education (HSBTE); Himachal Pradesh State Board of Technical Education (HPSBTE) and Delhi State Board of Technical Education (DSBTE) is presented here as:

Course Name	SLIET	PSBTE	HSBTE	HPSBTE	DSBTE			
First Semester	Applied Physics-I LTP 210 Chapters=6 Teaching Hours=48	LTP 400 Chapters=7 Teaching Hours=64	LTP 400 Chapters=7 Teaching Hours=64	LTP 310 Chapters=6 Teaching Hours=64	LTP 422 Chapters=6 Teaching Hours=64			
	1. Units and Measurements 2. Vector Analysis 3. Description of Motion 4. Laws of motion 5. Gravitation 6. Properties of matter	1. Units and Measurements 2. Force and Motion 3. Waves and Vibrations 4. Rotational motion 5. Work, Power and Energy 6. Properties of Matter 7. Thermometry	1. Units and Measurements 2. Force and Motion 3. Rotational motion 4. Gravitation and satellites 5. Work, Power and Energy 6. Properties of Matter 7. Heat and Temperature	1. Physical world, Units and Measurements 2. Force and Motion 3. Work, Power and Energy 4. Rotational motion 5. Properties of Matter 6. Heat and Thermometry	1. Measurements 2. Waves 3. Sound 4. Light; geometrical optics 5. Laser and its applications 6. Radioactivity and detection of radiation			
Second Semester	Applied Physics-I Lab	No. of experiments=12	No. of experiments=14	No. of experiments=8	No. of experiments=11	No. of experiments=10		
	Applied Physics-II LTP 210 Chapters=6 Teaching Hours=48	LTP 400 Chapters=7 Teaching Hours=64	LTP 400 Chapters=7 Teaching Hours=64	LTP 310 Chapters=6 Teaching Hours=64	LTP 310 Chapters=6 Teaching Hours=64	No course of Physics is offered in Second Semester		
Applied Physics-II Lab	1. Electrostatics 2. Current electricity 3. Electromagnetic induction and Alternating current 4. Thermal and magnetic effects of current 5. Moment of Inertia 6. Wave optics	1. Optics 2. Electrostatics 3. DC circuits 4. Electromagnetism 5. Semiconductor Physics 6. Modern Physics	1. Waves and vibrations 2. Applications of sound waves 3. Principles of optics 4. Electrostatics 5. Current electricity 6. Semiconductor Physics 7. Modern Physics	1. Wave motion and its applications 2. Optics 3. Electrostatics 4. Current Electricity 5. Electromagnetism 6. Semiconductor Physics 7. Modern Physics	No. of experiments=13	No. of experiments=12	No. of experiments=9	No. of experiments=11

Signature

Based on the above comparison of Physics courses offered by different technical boards, the proposed Course topics (contents can also be discussed and modified) of BSPH-103 and BSPH-104 at SLIET Longowal for discussion may be as:

PH-111	PH-121	BSPH-103	BSPH-104
LTP 310	LTP 310	LTP 210	LTP 210
<ol style="list-style-type: none"> 1. Units and Measurements 2. Vector Analysis 3. Description of Motion 4. Laws of motion 5. Gravitation 6. Simple Harmonic Motion 7. Properties of matter 8. Heat and Thermodynamics 	<ol style="list-style-type: none"> 1. Electrostatics 2. Current electricity 3. Magnetism 4. Electromagnetic induction and Alternating current 5. Thermal and magnetic effects of current 6. Moment of Inertia 7. Wave optics 8. Ray optics and optical instruments 	<ol style="list-style-type: none"> 1. Units and Dimensions 2. Force and Motion 3. Gravitation 4. Waves & vibrations 5. Properties of Matter 6. Heat & thermodynamics 	<ol style="list-style-type: none"> 1. Electrostatics 2. Current electricity 3. Thermal and magnetic effects of current 4. Optics (Ray and Wave) 5. Semiconductor Physics 6. Modern Physics

