

# Indian Institute of Space Science and Technology

## Curriculum and Syllabus for MTech Optical Engineering

### SEMESTER I

Code	Course Title	L	T	P	C
<a href="#">PH611</a>	<a href="#">Optical Engineering Fundamentals</a>	3	0	0	3
<a href="#">PH612</a>	<a href="#">Opto Mechanical Design Analysis</a>	3	0	0	3
<a href="#">PH613</a>	<a href="#">Optical Fabrication and Testing</a>	3	0	0	3
<a href="#">PH614</a>	<a href="#">Lasers and Optoelectronics</a>	3	0	0	3
<a href="#">PH619</a>	<a href="#">Fourier Optics</a>	3	0	0	3
<a href="#">PH631</a>	<a href="#">Optics and Optoelectronics Lab</a>	0	0	3	1
<a href="#">PH632</a>	<a href="#">Design and Analysis Lab</a>	0	0	3	1
Total		15	0	6	17

### SEMESTER II

Code	Course Title	L	T	P	C
<a href="#">PH621</a>	<a href="#">Guided Wave Optics</a>	3	0	0	3
<a href="#">PH622</a>	<a href="#">Adaptive Optics</a>	3	0	0	3
<a href="#">PH623</a>	<a href="#">Optical System Analysis and Design</a>	3	0	0	3
<a href="#">E01</a>	<a href="#">Elective I</a>	3	0	0	3
<a href="#">E02</a>	<a href="#">Elective II</a>	3	0	0	3
<a href="#">PH641</a>	<a href="#">Guided Wave Optics Lab</a>	0	0	3	1
<a href="#">PH642</a>	<a href="#">Adaptive Optics Lab</a>	0	0	3	1
<a href="#">PH651</a>	<a href="#">Seminar</a>	0	0	0	1
Total		15	0	6	18

### SEMESTER III

Code	Course Title	L	T	P	C
<a href="#"><u>PH751</u></a>	<a href="#"><u>Project Phase I</u></a>	0	0	0	13
<a href="#"><u>PH752</u></a>	<a href="#"><u>Comprehensive Viva</u></a>	0	0	0	2
	Total	0	0	0	15

### SEMESTER IV

Code	Course Title	L	T	P	C
<a href="#"><u>PH754</u></a>	<a href="#"><u>Project Phase II</u></a>	0	0	0	20
	Total	0	0	0	20

### ELECTIVES

Code	Course Title	L	T	P	C
<a href="#"><u>PH661</u></a>	<a href="#"><u>Optical Thin Films Science and Technology</u></a>	3	0	0	3
<a href="#"><u>PH662</u></a>	<a href="#"><u>Optical and electro-optical sensors</u></a>	3	0	0	3
<a href="#"><u>PH663</u></a>	<a href="#"><u>Integrated Optics</u></a>	3	0	0	3
<a href="#"><u>PH664</u></a>	<a href="#"><u>Optical Communication</u></a>	3	0	0	3
<a href="#"><u>PH665</u></a>	<a href="#"><u>Advanced Optoelectronics</u></a>	3	0	0	3
<a href="#"><u>PH666</u></a>	<a href="#"><u>Statistical and Quantum Optics</u></a>	3	0	0	3
<a href="#"><u>PH667</u></a>	<a href="#"><u>Non-Linear Optics</u></a>	3	0	0	3
<a href="#"><u>PH668</u></a>	<a href="#"><u>MEMS and MOEMS</u></a>	3	0	0	3
<a href="#"><u>PH669</u></a>	<a href="#"><u>Laser Applications</u></a>	3	0	0	3
<a href="#"><u>PH670</u></a>	<a href="#"><u>Quantum Optical Communication</u></a>	3	0	0	3
<a href="#"><u>PH671</u></a>	<a href="#"><u>Nano Optics</u></a>	3	0	0	3