

Course Structure

Semester I

A		Theory		
Sl. No.	Code	Course Title	Hrs/Wk [L-T-P]	Credit
1	NST101	Fundamentals of Nanoscience	3-1-0	4
2	NST102	Synthesis of Nanomaterials	3-1-0	4
3	NST103	Characterization of Nanomaterials	3-1-0	4
4	NST104	Biology for Nanoscience	3-1-0	4
		Total Theory	12-4-0	16
B		Practical		
5	NSP111	Nanotechnology Lab-I	0-0-9	3
6	NSP112	Biology Lab-I	0-0-6	2
7	NSP113	Biostatistics & computing Lab - I	0-0-6	2
		Total Practical	0-0-21	7
C		Sessional		
8	NSS121	Communicative English & HR management - I	0-0-3	1
		Total Sessional	0-0-3	1
		Semester Total	12-4-24	24

Semester II

A		Theory		
Sl. No.	Code	Course Title	Hrs/Wk [L-T-P]	Credit
1	NSTO201	Open Choice	3-1-0	4
2	NST202	Aspects of Nanotechnology	3-1-0	4
3	NST203	Computational Nanoscience	3-1-0	4
4	NST204	Nanotechnology in medical science	3-1-0	4
		Total Theory	12-4-0	16
B		Practical		
5	NSP211	Nanotechnology Lab-II	0-0-9	3
6	NSP212	Biology Lab-II	0-0-6	2
7	NSP213	Computational Nanoscience Lab	0-0-6	2
		Total Practical	0-0-21	7
C		Sessional		
8	NSS221	Communicative English & HR management - II	0-0-3	1
		Total Sessional	0-0-3	1
		Semester Total	12-4-24	24

Semester III

A		Theory		
Sl. No.	Code	Course Title	Hrs/Wk [L-T-P]	Credit
1	NST301	Bioentrepreneurship, IPR & Bioethics	2-1-0	3
2	NST302	Research Methodology	2-1-0	3
3	NSE303	Elective I	0-2-0	2
4	NSE304	Elective II	0-2-0	2
5	NSE305	Elective III (Student's Choice)	0-2-0	2
		Total Theory	4-8-0	12
C		Sessional		
9	NSS321	Review on frontiers in Nanoscience	0-0-6	2
10	NSS322	Project/Training Seminar		2
		Total Sessional	0-0-6	4
		Semester Total	4-8-6	16

List of electives (NSE303 and NSE304)

1. Advanced spectroscopy for Nanoscience
2. Food and agricultural nanotechnology
3. Nanooptics

4. Nanomedicine
5. Environmental nanotechnology
6. Industrial nanotechnology

Semester IV

C		Sessional		
Sl. No.	Code	Course Title	Hrs/Wk [L-T-P]	Credit
1	NSS421	Dissertation (Final)	0-0-40	10
2	NSS422	Seminar	0-0-6	2
3	NSS423	Grand Viva		4
		Total Sessional	0-0-40	16
		Semester Total	0-0-40	16

Details of abbreviated paper codes

NST Nano Science Theory

NSP Nano Science Practical

NSS Nano Science Sessional

NSTO Nano Science Theory (Open Choice)

NSE Nano Science Elective

LSS Life Skill Course Sessional

1st Digit in the Suffix No. of Semester [1= Semester I, 2= Semester II, 3= Semester III, 4= Semester IV]

2nd Digit in the Suffix Type of paper [0 = Theory paper; 1 = Practical paper; 2 = Sessional Paper]

3rd Digit in the Suffix No. of paper [1 = 1st paper; 2 = 2nd paper; 3 = 3rd paper; 4 = 4th paper]