
DEPARTMENT OF NANOSCIENCE AND TECHNOLOGY

COURSE STRUCTURE (2019-21)

S. No.	Course Code	Course Name (Semester-I)	Teaching Scheme			Credits
			L	T	P	
1.	NAN-611010	Synthesis and Properties of Nanomaterials	3	0	0	3
2.	NAN-611020	Numerical Techniques Modelling and Simulation	3	0	0	3
3.	NAN-616030	Quantum Mechanics	3	0	0	3
4.	NAN-616040	Self- Assembly and Molecular Engineering	3	0	0	3
5.	NAN-616050	Characterization of Nanomaterials	3	0	0	3
6.	NAN-612060	Synthesis of Nanomaterials Lab	0	0	4	2
7.	NAN-612070	Modelling and Simulation Lab	0	0	4	2
8.	MLC-610080	Research Methodology and IPR	2	0	0	2
9.	AUD-610090	Biology for Nanotechnology	2	0	0	0
10.	AUD-610100	Basic Mathematics	2	0	0	0
Total						21

S. No.	Course Code	Course Name (Semester-II)	Teaching Scheme			Credits
			L	T	P	
11.	NAN 621010	Advance Characterization Techniques of Nanomaterials	3	0	0	3
12.	NAN 621020	Nanotechnology for Energy System	3	0	0	3
13.	NAN 626030	Nanobiotechnology	3	0	0	3
14.	NAN 626040	Nanoelectronics	3	0	0	3
15.	NAN 622050	Nanomaterials Applications Lab	0	0	4	2
16.	NAN 622060	Nanomaterials Characterization Lab	0	0	4	2
17.	NAN 624070	Mini Project with Seminar		0	0	2
18.	AUD 620080	Polymer Engineering	2	0	0	0
Total						18

S. No.	Course Code	Course Name (Semester-III)	Teaching Scheme			Credits
			L	T	P	
1.	NAN-714030	Dissertation-I	0	0	20	10
2.	NAN-716010	Nanocomposites	3	0	0	3
3.	NAN-716020	Nanomagnetism	3	0	0	3
Total						16

S. No.	Course Code	Course Name (Semester-IV)	Teaching Scheme			Credits
			L	T	P	
1.	NAN-724010	Dissertation-II	0	0	32	16
Total						16

DEPARTMENT OF NANOSCIENCE AND TECHNOLOGY
COURSE STRUCTURE (2020-22)

S. No.	Course Code	Course Name (Semester-I)	Teaching Scheme			Credits
			L	T	P	
19.	NAN-611010	Synthesis and Properties of Nanomaterials	3	0	0	3
20.	NAN-611020	Numerical Techniques Modelling and Simulation	3	0	0	3
21.	NAN-616030	Quantum Mechanics	3	0	0	3
22.	NAN-616040	Self- Assembly and Molecular Engineering	3	0	0	3
23.	NAN-616050	Characterization of Nanomaterials	3	0	0	3
24.	NAN-612060	Synthesis of Nanomaterials Lab	0	0	4	2
25.	NAN-612070	Modelling and Simulation Lab	0	0	4	2
26.	MLC-610080	Research Methodology and IPR	2	0	0	2
27.	AUD-610090	Biology for Nanotechnology	2	0	0	0
28.	AUD-610100	Basic Mathematics	2	0	0	0
Total						21

S. No.	Course Code	Course Name (Semester-II)	Teaching Scheme			Credits
			L	T	P	
29.	NAN 621010	Advance Characterization Techniques of Nanomaterials	3	0	0	3
30.	NAN 621020	Nanotechnology for Energy System	3	0	0	3
31.	NAN 626030	Nanobiotechnology	3	0	0	3
32.	NAN 626040	Nanoelectronics	3	0	0	3
33.	NAN 622050	Nanomaterials Applications Lab	0	0	4	2
34.	NAN 622060	Nanomaterials Characterization Lab	0	0	4	2
35.	NAN 624070	Mini Project with Seminar		0	0	2
36.	AUD 620080	Polymer Engineering	2	0	0	0
Total						18

S. No.	Course Code	Course Name (Semester-III)	Teaching Scheme			Credits
			L	T	P	
1.	NAN-714030	Dissertation-I	0	0	20	10
2.	NAN-716010	Nanocomposites	3	0	0	3
3.	NAN-716020	Nanomagnetism	3	0	0	3
4.	NAN-716070 (*NPTEL)	Advanced Materials and Processes	3	0	0	3
5.	NAN-716080 (*NPTEL)	Introduction to Composites	3	0	0	3
Total						16

- There is option for either NPTEL papers or programmes elective 6 and open elective papers. Total credits in semester-III shall remain 16

S. No.	Course Code	Course Name (Semester-IV)	Teaching Scheme			Credits
			L	T	P	
1.	NAN-724010	Dissertation-II	0	0	32	16
Total						16

DEPARTMENT OF NANOSCIENCE AND TECHNOLOGY

COURSE STRUCTURE (2021-23)

S. No	Course Code	Course Name (Semester-I)	Teaching Scheme			Credits
			L	T	P	
37.	NAN-611010	Synthesis and Properties of Nanomaterials	3	0	0	3
38.	NAN-611020	Numerical Techniques Modelling and Simulation	3	0	0	3
39.	NAN-616030	Quantum Mechanics	3	0	0	3
40.	NAN-616040	Self- Assembly and Molecular Engineering	3	0	0	3
41.	NAN-616050	Characterization of Nanomaterials	3	0	0	3
42.	NAN-612060	Synthesis of Nanomaterials Lab	0	0	4	2
43.	NAN-612070	Modelling and Simulation Lab	0	0	4	2
44.	MLC-610080	Research Methodology and IPR	2	0	0	2
45.	AUD-610090	Biology for Nanotechnology	2	0	0	0
46.	AUD-610100	Basic Mathematics	2	0	0	0
Total						21

S. No	Course Code	Course Name (Semester-II)	Teaching Scheme			Credits
			L	T	P	
47.	NAN 621010	Advance Characterization Techniques of Nanomaterials	3	0	0	3
48.	NAN 621020	Nanotechnology for Energy System	3	0	0	3
49.	NAN 626030	Nanobiotechnology	3	0	0	3
50.	NAN 626040	Nanoelectronics	3	0	0	3
51.	NAN 622050	Nanomaterials Applications Lab	0	0	4	2
52.	NAN 622060	Nanomaterials Characterization Lab	0	0	4	2
53.	NAN 624070	Mini Project with Seminar		0	0	2
54.	AUD 620080	Polymer Engineering	2	0	0	0
Total						18

S. No.	Course Code	Course Name (Semester-III)	Teaching Scheme			Credits
			L	T	P	
1.	NAN-714030	Dissertation-I	0	0	20	10
2.	NAN-716010	Nanocomposites	3	0	0	3
3.	NAN-716020	Nanomagnetism	3	0	0	3
4.	NAN-716070 (*NPTEL)	Advanced Materials and Processes	3	0	0	3
5.	NAN-716080 (*NPTEL)	Introduction to Composites	3	0	0	3
Total						16

- There is option for either NPTEL papers or programmes elective 6 and open elective papers. Total credits in semester-III shall remain 16

S. No.	Course Code	Course Name (Semester-IV)	Teaching Scheme			Credits
			L	T	P	
1.	NAN-724010	Dissertation-II	0	0	32	16
Total						16

DEPARTMENT OF NANOSCIENCE AND TECHNOLOGY
COURSE STRUCTURE (2023-25)

S. No.	Course Code	Course Name (Semester-I)	Teaching Scheme			Credits
			L	T	P	
55.	NAN-611010	Synthesis and Properties of Nanomaterials	3	0	0	3
56.	NAN-611020	Numerical Techniques Modelling and Simulation	3	0	0	3
57.	NAN-616030	Quantum Mechanics	3	0	0	3
58.	NAN-616040	Self- Assembly and Molecular Engineering	3	0	0	3
59.	NAN-616050	Characterization of Nanomaterials	3	0	0	3
60.	NAN-612060	Synthesis of Nanomaterials Lab	0	0	4	2
61.	NAN-612070	Modelling and Simulation Lab	0	0	4	2
62.	MLC-610080	Research Methodology and IPR	2	0	0	2
63.	AUD-610090	Biology for Nanotechnology	2	0	0	0
64.	AUD-610100	Basic Mathematics	2	0	0	0
Total						21

S. No.	Course Code	Course Name (Semester-II)	Teaching Scheme			Credits
			L	T	P	
65.	NAN 621010	Advance Characterization Techniques of Nanomaterials	3	0	0	3
66.	NAN 621020	Nanotechnology for Energy System	3	0	0	3
67.	NAN 626030	Nanobiotechnology	3	0	0	3
68.	NAN 626040	Nanoelectronics	3	0	0	3
69.	NAN 622050	Nanomaterials Applications Lab	0	0	4	2
70.	NAN 622060	Nanomaterials Characterization Lab	0	0	4	2
71.	NAN 624070	Mini Project with Seminar		0	0	2
72.	AUD 620080	Polymer Engineering	2	0	0	0
Total						18

S. No.	Course Code	Course Name (Semester-III)	Teaching Scheme			Credits
			L	T	P	
1.	NAN-714030	Dissertation-I	0	0	20	10
2.	NAN-716010	Nanocomposites	3	0	0	3
3.	NAN-716020	Nanomagnetism	3	0	0	3
4.	NAN-716070 (*NPTEL)	Advanced Materials and Processes	3	0	0	3
5.	NAN-716080 (*NPTEL)	Introduction to Composites	3	0	0	3
Total						16

- There is option for either NPTEL papers or programmes elective 6 and open elective papers. Total credits in semester-III shall remain 16

S. No.	Course Code	Course Name (Semester-IV)	Teaching Scheme			Credits
			L	T	P	
1.	NAN-724010	Dissertation-II	0	0	32	16
Total						16



