

DELHI TECHNOLOGICAL UNIVERSITY
SCHEME OF TEACHING & EVALUATION

MASTER OF TECHNOLOGY IN NANOSCIENCE AND TECHNOLOGY (NST)

The following alphanumeric coding scheme has been adopted

Core Courses XXXYMN

Elective Courses XXXYCMN

XXX abbreviates a particular M. Tech. program, Y – (5 for M. Tech. 1 st year, 6 for M. Tech. 2 nd year),

C – credit of the course (4/3/2),

MN – Subject code (Odd number for odd semester and even number for even semester courses)

Semester-I

	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	Total Credits
Group A	1	NST501	Physics of Nanomaterials	Core	4	3	0	2	15	25	20	40	-	17
	2	NST503	Chemistry of Nanomaterials	Core	4	3	0	2	15	25	20	40	-	
Group B	3	NST5401/5403/.....	Elective 1	Elective	4	4	0	0	20	0	30	50	-	
	4	NST5301/5303/.....	Elective 2	Elective	3	3	0	0	20	0	30	50	-	
	5	NST5201/5203/...../ UEC5201/5203/.....	Elective 3/University Elective I	Elective	2	2	0	0	20	-	30	50	-	

Semester-II

	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	Total Credits
Group C	1	NST502	Analytical Techniques	Core	4	3	0	2	15	25	20	40	-	

	2	NST504	Design and Synthesis of Nanostructures	Core	4	3	0	2	15	25	20	40	-	17
Group D	3	NST5402/5404/.....	Elective 4	Elective	4	4	0	0	20	0	30	50	-	
	4	NST5302/5304/.....	Elective 5	Elective	3	3	0	0	20	0	30	50	-	
	5	NST5202/5204/...../ UEC5202/5204/.....	Elective 6/University Elective II	Elective	2	2	0	0	20	-	30	50	-	
Semester-III														
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	Total Credits
	Track 1													12
Group E	1	NST651	Research Project	Core	12						40	60		
	Track 2													
	1	NST601	Major Project I	Core	3						40	60		
	2	NST6401/6403/.....	Elective 7	Elective	4	4	0	0	20	0	30	50	-	
	3	NST6301/6303/.....	Elective 8	Elective	3	3	0	0	20	0	30	50	-	
4	NST6201/6203/.....	Elective 9	Elective	2	2	0	0	20	0	30	50	-		
Semester-IV														
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	Total Credits
Group F	Track 1													12
	1	NST652	Research Project	Core	12						40	60		

Track 2													
1	NST602	Major Project II	Core	12						40	60		

LIST OF ELECTIVES :														
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	
Elective 1	1	NST5401	Computational Physics and Programming	Elective	4	4	0	0	20	0	30	50	-	
	2	NST5403	Nanoscale Modeling and Simulation		4	4	0	0	20	0	30	50	-	
	3	NST5405	Environmental Nanotechnology		4	4	0	0	20	0	30	50	-	
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	
Elective 2	1	NST5301	Thin Film Technology	Elective	3	3	0	0	15	25	20	40	-	
	2	NST5303	Functional Materials and Devices		3	3	0	0	15	25	20	40	-	
	3	NST5305	Material Science at Nanoscale		3	3	0	0	15	25	20	40	-	
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	
Elective 3	1	NST5201	Seminar	Elective	2	0	0	2	-	100	-	-	-	
	2	NST5203	Research Methodology		2	2	0	0	10	15	25	50	-	
	3	NST5205	Micro Economics		2	2	0	0	10	15	25	50	-	

	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	
Elective 4	1	NST5402	Nanophotonics	Elective	4	4	0	0	20	0	30	50	-	
	2	NST5404	Spectroscopic Techniques for Nanomaterials		4	4	0	0	20	0	30	50	-	
	3	NST5406	Molecular Spectroscopy		4	4	0	0	20	0	30	50	-	
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	
Elective 5	1	NST5302	Minor project	Elective	3	0	0	-	-	40	-	-	60	
	2	NST5304	Renewable Energy Technology		3	3	0	0	20	0	30	50	-	
	3	NST5306	Structural Analysis of Nanomaterials		3	3	0	0	20	0	30	50	-	
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	
Elective 6	1	NST5202	Nano-Electronics and Devices	Elective	2	2	0	0	20	0	30	50	-	
	2	NST5204	Nanocomposites		2	2	0	0	20	0	30	50	-	
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	
Elective 7	1	NST6401	Nanobiotechnology	Elective	4	4	0	0	20	0	30	50	-	
	2	NST6403	Nanosensors and Devices		4	4	0	0	20	0	30	50	-	
	3	NST6405	Microelectromechanical Systems (MEMS)		4	4	0	0	20	0	30	50	-	
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	

Elective 8	1	NST6301	Nanolithography and Device Fabrication	Elective	3	3	0	0	20	0	30	50	-
	2	NST6303	Plasma Technology		3	3	0	0	20	0	30	50	-
	3	NST6305	Nanotechnology for Medical Diagnostic and Therapy		3	3	0	0	20	0	30	50	-
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE
Elective 9	1	NST6201	Spintronic	Elective	2	2	0	0	20	0	30	50	-
	2	NST6203	Biophotonics		2	2	0	0	20	0	30	50	-