

M.Tech in Nanotechnology & Renewable Energy**CURRICULUM**

Course Code	Type	Course	L T P	Credits
NS 601	FC	Statistics and Research Methodology	1 0 1	2
NS 602	FC	Science and Properties of Nanomaterials	3 0 0	3
NT 601	FC	Introduction to Quantum Mechanics	3 0 0	3
NT 603	SC	Energy Conversion Devices	3 0 0	3
NT 705	FC	Physics of Semiconductors	3 0 0	3
NT	SC	Lab-I: Optoelectronics	0 0 2	2
HU 601	HU	Cultural education*	0 0 0	P/F
			Credits	16

First Semester

*Non-credit course

Second Semester

Course Code	Type	Course	L T P	Credits
NT	FC	Thermodynamics and kinetics of nanomaterials	3 0 0	3
NS 603	SC	Nanomaterials Chemistry and Design	3 1 0	4
NT 605	SC	Energy Storage Devices	3 0 0	3
NS 606	SC	Characterization of Nanomaterials	3 0 0	3
NT	SC	Science and technology of gas-phase synthesis	3 0 0	3
NS 607	SC	Lab-II: Nanomaterials Lab	1 0 2	3
			Credits	19

Third Semester

Course Code	Type	Course	L T P	Credits
NT 707	SC	Hydrogen Storage and Carbon Capture Technologies	3 0 0	3
NT 607	SC	Nanodevice Fabrication	2 0 2	4
NT 798	P	Dissertation		10
HU 602	HU	Technical writing and Presentation*		P/F
			Credits	17

Fourth Semester

Course Code	Type	Course	L T P	Credits
NT 799	P	Dissertation		12
Credits				12

Total credits for course: 64

List of Courses
Foundation Core

Course Code	Course	L T P	Cr
NS 601	Statistics and research methodology	1 0 1	2
NS 602	Science and properties of nanomaterials	3 0 0	3
NT 601	Introduction to quantum mechanics	3 0 0	3
NT 705	Physics of semiconductors	3 0 0	3
NT	Thermodynamics and kinetics of nanomaterials	3 0 0	3
Credits			14

Subject Core

Course Code	Course	L T P	Cr
NT 603	Energy Conversion Devices	3 0 0	3
NT 605	Energy Storage Devices	3 0 0	3
NT	Lab-I: Optoelectronics	0 0 2	2
NS 603	Nanomaterials Chemistry and Design	3 1 0	4
NT	Science and technology of gas-phase synthesis	3 0 0	3
NS 606	Characterization of Nanomaterials	3 0 0	3
NS 607	Lab-II: Nanomaterials Lab	1 0 2	3
NT 707	Hydrogen Storage and Carbon Capture Technologies	3 0 0	3
NT 607	Nanodevice Fabrication	2 0 2	4
Credits			28

Project Work

Course Code	Course	L T P	Credits
NT 798	Dissertation		10
NT 799	Dissertation		12
Total credits: 22			

Total credits for Graduation: 64