## **INDIAN INSTITUTE OF TECHNOLOGY** UG CURRICULUM

Programme- B.Tech.,B.S.,DD Batch Year- 2024

Department	Division	Semester	Course code	Course name	Credits
Aerospace Engineering	D2	1	AE 103	A Historical Perspective of Aerospace Engineering	6
			BB 101	Biology	6
			CH 117	Chemistry lab	3
			GC 101	Gender sensitization course	0
			MA 105	Calculus	8
			MS 101	Makerspace	8
			NOCS 01	NCC/NSS/NSO	0
		2	AE 152	Introduction to Aerospace Engineering	6
			CS 101	Computer programming	6
			HSS/IDC/ ENT	Introduction to HASMED	8
			MA 110	Linear Algebra and Differential Equations	8
			NOCS 02	NCC/NSS/NSO	0
			PH 117	Physics lab	3
Chemical Engineering	D4	1	CH 111	Chemistry	8
			CS 101	Computer programming	6
			GC 101	Gender sensitization course	0
			HSS/IDC/ ENT	Introduction to HASMED	8
			MA 105	Calculus	8
			NOCS 01	NCC/NSS/NSO	0
			PH 117	Physics lab	3
		2	CH 117	Chemistry lab	3

Department	Division	Semester	Course code	Course name	Credits
			CL 102	Material and Energy Balances	6
			MA 110	Linear Algebra and Differential Equations	8
			MS 101	Makerspace	8
			NOCS 02	NCC/NSS/NSO	0
			PH 110	Introduction to Classical and Quantum Physics	8
Chemistry	D1	1	BB 101	Biology	6
			CH 111	Chemistry	8
			CH 117	Chemistry lab	3
			GC 101	Gender sensitization course	0
			MA 105	Calculus	8
			MS 101	Makerspace	8
			NOCS 01	NCC/NSS/NSO	0
		2	CH 110	Interpretative Spectroscopy (DIC - 2)	6
			CS 101	Computer programming	6
			HSS/IDC/ ENT	Introduction to HASMED	8
			NOCS 02	NCC/NSS/NSO	0
			PH 110	Introduction to Classical and Quantum Physics	8
			PH 117	Physics lab	3
Civil Engineering	D2	1	CE 103	Introducrtion to Civil Engg (DIC 1)	6
			CH 111	Chemistry	8
			CH 117	Chemistry lab	3
			GC 101	Gender sensitization course	0
			MA 105	Calculus	8

Department	Division	Semester	Course code	Course name	Credits
			MS 101	Makerspace	8
			NOCS 01	NCC/NSS/NSO	0
		2	CE 102	Engineering Mechanics (DIC 2)	6
			CS 101	Computer programming	6
			HSS/IDC/ ENT	Introduction to HASMED	8
			MA 110	Linear Algebra and Differential Equations	8
			NOCS 02	NCC/NSS/NSO	0
			PH 117	Physics lab	3
Computer Science and Engineering	D3	1	CS 101	Computer programming	6
			CS 105	Discrete Structures	6
			GC 101	Gender sensitization course	0
			HSS/IDC/ ENT	Introduction to HASMED	8
			MA 105	Calculus	8
			NOCS 01	NCC/NSS/NSO	0
			PH 117	Physics lab	3
		2	BB 101	Biology	6
			CH 117	Chemistry lab	3
			CS 108	Software Systems Lab	8
			MA 110	Linear Algebra and Differential Equations	8
			MS 101	Makerspace	8
			NOCS 02	NCC/NSS/NSO	0
Economics	D3	1	CH 111	Chemistry	8
			CS 101	Computer programming	6

Department	Division	Semester	Course code	Course name	Credits
			GC 101	Gender sensitization course	0
			HSS/IDC/ ENT	Introduction to HASMED	8
			MA 105	Calculus	8
			NOCS 01	NCC/NSS/NSO	0
			PH 117	Physics lab	3
		2	CH 117	Chemistry lab	3
			EC 101	Economics	6
			MA 110	Linear Algebra and Differential Equations	8
			MS 101	Makerspace	8
			NOCS 02	NCC/NSS/NSO	0
			PH 110	Introduction to Classical and Quantum Physics	8
Electrical Engineering	D4	1	CS 101	Computer programming	6
			EE 103	Introduction to Electrical Engineering	6
			GC 101	Gender sensitization course	0
			HSS/IDC/ ENT	Introduction to HASMED	8
			MA 105	Calculus	8
			NOCS 01	NCC/NSS/NSO	0
			PH 117	Physics lab	3
		2	CH 117	Chemistry lab	3
			EE 114	Power Engineering - I	6
			MA 110	Linear Algebra and Differential Equations	8
			MS 101	Makerspace	8
			NOCS 02	NCC/NSS/NSO	0

Department	Division	Semester	Course code	Course name	Credits
			PH 110	Introduction to Classical and Quantum Physics	8
Energy Science and Engineering	D1	1	CH 111	Chemistry	8
			CH 117	Chemistry lab	3
			EN 110	Energy Engineering Fundamentals	6
			GC 101	Gender sensitization course	0
			MA 105	Calculus	8
			MS 101	Makerspace	8
			NOCS 01	NCC/NSS/NSO	0
		2	CS 101	Computer programming	6
			HSS/IDC/ ENT	Introduction to HASMED	8
			MA 110	Linear Algebra and Differential Equations	8
			NOCS 02	NCC/NSS/NSO	0
			PH 110	Introduction to Classical and Quantum Physics	8
			PH 117	Physics lab	3
Engineering Physics	D2	1	BB 101	Biology	6
			CH 117	Chemistry lab	3
			GC 101	Gender sensitization course	0
			MA 105	Calculus	8
			MS 101	Makerspace	8
			NOCS 01	NCC/NSS/NSO	0
			PH 109	Fundamental Themes in Physics (DIC 1)	6
		2	CS 101	Computer programming	6
			HSS/IDC/ ENT	Introduction to HASMED	8

Department	Division	Semester	Course code	Course name	Credits
			MA 110	Linear Algebra and Differential Equations	8
			NOCS 02	NCC/NSS/NSO	0
			PH 110	Introduction to Classical and Quantum Physics	8
			PH 117	Physics lab	3
Environmental Science and Engineering	D1	1	CH 111	Chemistry	8
			CH 117	Chemistry lab	3
			ES 101	Introduction to Environmental Science & Engineering	6
			GC 101	Gender sensitization course	0
			MA 105	Calculus	8
			MS 101	Makerspace	8
			NOCS 01	NCC/NSS/NSO	0
		2	CS 101	Computer programming	6
			ES 204	Environmental Chemistry	6
			HSS/IDC/ ENT	Introduction to HASMED	8
			MA 110	Linear Algebra and Differential Equations	8
			NOCS 02	NCC/NSS/NSO	0
			PH 117	Physics lab	3
Industrial Engineering and Operations Research	D2	1	IE 101	Intro to IEOR	6
			MA105	Calculus	8
			BB 101	Biology	6
			MS 101	Makerspace	8
			CH 117	Chemistry lab	3
			NOCS 01	NCC/NSS/NSO	0

Department	Division	Semester	Course code	Course name	Credits
			GC 101	Gender sensitization course	0
			TA 101	TA Course	0
		2	IE 102	Probability and Statistics	6
			MA 110	Linear Algebra & Differential Equations	8
			PH 117	Physics lab	3
			CS 101	Computer Programming	6
			HSS/IDC/ ENT	Introduction to HASMED	8
			NOCS 02	NCC/NSS/NSO	0
Mathematics	D1	1	CH 117	Chemistry lab	3
			GC 101	Gender sensitization course	0
			MA 105	Calculus	8
			MA 113	Mathematics and Its History	6
			MA 114	An Introduction to Mathematical Concepts	6
			MS 101	Makerspace	8
			NOCS 01	NCC/NSS/NSO	0
		2	CS 101	Computer programming	6
			HSS/IDC/ ENT	Introduction to HASMED	8
			MA 110	Linear Algebra and Differential Equations	8
			NOCS 02	NCC/NSS/NSO	0
			PH 110	Introduction to Classical and Quantum Physics	8
			PH 117	Physics lab	3
Mechanical Engineering	D1	1	BB 101	Biology	6
			CH 117	Chemistry lab	3

Department	Division	Semester	Course code	Course name	Credits
			GC 101	Gender sensitization course	0
			MA 105	Calculus	8
			ME 103	Introduction to STEM as DIC- 1Mechanical Department Introductory Course-I	6
			MS 101	Makerspace	8
			NOCS 01	NCC/NSS/NSO	0
		2	CS 101	Computer programming	6
			HSS/IDC/ ENT	Introduction to HASMED	8
			MA 110	Linear Algebra and Differential Equations	8
			ME 104	Engineering Mechanics	6
			NOCS 02	NCC/NSS/NSO	0
			PH 111	Introduction to Classical Physics	4
Metallurgical Engineering and Material Science	D3	1	CH 111	Chemistry	8
			CS 101	Computer programming	6
			GC 101	Gender sensitization course	0
			HSS/IDC/ ENT	Introduction to HASMED	8
			MA 105	Calculus	8
			NOCS 01	NCC/NSS/NSO	0
			PH 117	Physics lab	3
		2	CH 117	Chemistry lab	3
			MA 110	Linear Algebra and Differential Equations	8
			MM 105	It's a materials world!	6
			MS 101	Makerspace	8
			NOCS 02	NCC/NSS/NSO	0

Department	Division	Semester	Course code	Course name	Credits
			IPH 110	Introduction to Classical and Quantum Physics	8

## Programme- B.Des., Batch Year- 2024

Department	Division	Semester	Course code	Course name	Credits
Industrial Design		1	DE 101	Art and Design Fundamentals 2D	0
			DE 111	Communication through sculptural forms	6
			DE 113	Introduction to filmmaking	6
			DE 115	Drawing Tools, Lines, and Forms	4
			DE 117	Introduction to Writing	4
			DE 119	Material exploration	4
			DE 135	Design Studio I	6
			NOCS01	NCC/NSS/NSO (Mandatory)	0
_	-	2	DE 102	[3D	6
			DE 106	Typography Fundamentals and Exploratory Printing	6
			DE 107	A study of the Power of Words	2
			DE 112	Communication through illustrations	4
			DE 116	Exploration in Drawing, Tonalities and Textures	4
			DE 134	Knowledge Organization and Communication	4
			DE 136	Design Studio Project II	6
			Softcore 1 & 2	Softcore courses	4
			NOCS02	NCC/NSS/NSO (Mandatory)	