

Program Code: **XXX M.Tech. (Space Science and Technology)**
 Centre: **Centre for Space Science and Technology**
 Year: **I**
 Model: **2**

[illegible]

**CENTRE FOR SPACE SCIENCE AND TECHNOLOGY
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE**

Program Code: **XXX M.Tech. (Space Science and Technology)**

Centre: **Centre for Space Science and Technology**

Year: **II**

Model: **2**

Teaching Scheme					Contact Hours/Week			Exam Duration		Relative Weight(%)				
S.No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical	CWS	PRS	MTE	ETE	PRE
Semester-I (Autumn)														
1.	SSC-691	Internship Social Activity	ISA	3	-	-	-	-	-	-	-	-	-	-
2.	SSC-701A	Thesis Stage-I	THESIS	10	-	-	-	-	-	-	-	-	100	-
		Total		13										
Semester-II (Spring)														
1.	SSC-701B	Thesis Stage-II	THESIS	14	-	-	-	-	-	-	-	-	100	-
		Total		14										

Summary				
Semester	1	2	3	4
Semester-wise Total Credits	18	21	13	14
Total Credits	66			

M.Tech. (Space Science and Technology)**Program Elective Courses**

Teaching Scheme					Contact Hours/Week			Exam Duration		Relative Weight(%)				
S.No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical	CWS	PRS	MTE	ETE	PRE
1.	SSL-501	Materials for Extreme Conditions	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
2	SSL-502	Antennas for Space Applications	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
3.	SSL-503	Observing & Predicting Climate of Planets	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
4.	SSL-504	Orbital Mechanics	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
5.	SSL-505	Space Mission Design and Optimization	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
6.	SSL-506	Terrestrial Planets & Their Climate	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
7.	SSL-507	Astrochemistry	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
8.	SSL-508	Navigation, Guidance and Control of Launch Vehicles and Satellites	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
9.	SSL-509	Rocket Propulsion	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
10.	SSL-510	Space Economics and Policy	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
11.	SSL-511	Exploration of Planetary Interiors	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
12.	SSL-512	Statistics and Machine Learning for Space Studies	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
13.	SSL-513	Satellite Meteorology	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
14.	SSL-514	Astrobiology	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
15	SSL-515	Analysis & Design of Space Structures	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
16.	MTL-512	Engineering Ceramics	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
17.	ECL-631	RF Receiver Design	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
18.	ECL-550	Radar Signal Processing	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
19.	ESL-XXX	Planetary Science and Space Exploration	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
20.	PHL-514	Solar Terrestrial Physics	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-