

ADVANCE TRAINING ON SPACE WEATHER AND ITS EFFECT

DAY-1 :8 DECEMBER 2025

Time	TOPIC	Faculty name
0930-1100	Inauguration, Group Photograph and Welcome address by Director IIST	
1100-1130	Tea Break	
1130-1300	Introduction to Space Weather	Dipankar Banerjee, IIST
1300-1400	Lunch Break	
1400-1600		

DAY-2 : 9 DECEMBER 2025

Time	TOPIC	Faculty name
0930-1030	Earth's Magnetosphere	Ankush Bhaskar, SPL
1030-1045	Tea Break	
1045-1145	Ionosphere and its Variability	Tarun Pant
1145-1200	Tea Break	
1200-1300	Practical - Space Weather Observation Techniques	Ankush Bhaskar, SPL
1300-1400	Lunch Break	
1400-1600	Practical - Magnetometer Data Analysis	Ankush Bhaskar, SPL

DAY-3 : 10 DECEMBER 2025

Time	TOPIC	Expert's name
0930-1030	Solar Activity and its Cycles	Dipankar Banerjee
1030-1045	Tea Break	
	Advanced Topics in Space Weather • Heliospheric Physics • Cosmic Rays and Space Weather	Ankush Bhaskar, SPL
1045-1200	Tea Break	
1200-1300	Space Weather Modeling and Simulation: Focus on Solar Wind and CMEs	Bhargav Vaidya, IIT Indore
1300-1400	Lunch Break	
1400-1600	Practical - Simulations with Space Weather Toolkit - I	Bhargav Vaidya, IIT Indore

DAY-4 : 11 DECEMBER 2025

Time	TOPIC	Expert's name
0930-1030	Space Weather Simulation Tools: Global Perspective	Bhargav Vaidya, IIT Indore
1030-1045	Tea Break	
1045-1145	Practical - Simulations with Space Weather Toolkit - II	Bhargav Vaidya, IIT Indore
1145-1200	Tea Break	
1200-1300	Practical - Advanced Data Analysis Techniques	Bhargav Vaidya, IIT Indore
1300-1400	Lunch Break	
1400-1500	Overview of Space weather and Space Climate	Dibyendu Nand, CESSI
15:30-16:30	Space Weather Prediction Models	Dibyendu Nandi, CESSI

DAY-5 : 12 DECEMBER 2025

Time	TOPIC	Expert's name
0930-1030	Data Collection and Analysis	Vaibhav Pant ARIES , Nainital
1030-1045	Tea Break	
1045-1145	Real-Time Space Weather Monitoring Systems	Dibyendu Nandi CESSI
1145-1200	Tea Break	
1200-1300	Space Weather Awareness: Global Perspective	Dibyendu Nandi CESSI
1300-1400	Lunch Break	
1400-1600	Practical - Solar Observation	Vaibhav Pant ARIES Nainital

DAY-6 : 13 DECEMBER 2025

Time	TOPIC	Expert's name
0930-1100	Developing a National Space Weather Program	Dibyendu Nandi. CESSI
1030-1045	Tea Break	
1045-1145	Space Weather and Navigation Systems	
1145-1200	Tea Break	
1200-1300	Historical Case Studies of Space Weather Impacts Space Weather Resilience in Military Systems	VK Hariharan
1300-1400	Lunch Break	
1400-1600	Space Weather Effects on Satellites	VK Hariharan

DAY 7 : 14 DECEMBER 2025 (SUNDAY - HOLIDAY)

DAY-8 : 15 DECEMBER 2025

Time	TOPIC	Expert's name
0930-1030	Space Weather Effects on Ground-Based Systems	SV Sharma
1030-1045	Tea Break	
1045-1145	Space Weather and Communication and Navigation Systems	Venkatesh, PRL
1145-1200	Tea Break	
1200-1300	Space Weather Effects on Aviation	SV Sharma
1300-1400	Lunch Break	
1400-1600	Practical Case studies of communication and navigation failures	Venkatesh, PRL

DAY-9 : 16 DECEMBER 2025

Time	TOPIC	Expert's name
0930-1030	Case Study International and Indian Space missions	Kushgra Upadhaya, PRL
1030-1045	Tea Break	
1045-1145	Future Challenges in Space Weather	Kushgra Upadhaya, PRL
1145-1200	Tea Break	
1200-1300	Integrating Space Weather Data into Military Operations	Saikat Majumder, Digantra
1300-1400	Lunch Break	
1400-1600	Practical - Leveraging AI/ML for Enhanced Space Weather Forecasting and Military Operational Resilience	Saikat Majumder, Digantra

DAY-10 : 17 DECEMBER 2025

Time	TOPIC	Expert's name
0930-1030	Space Weather Effects on Military Systems	Chandrasekar
1030-1045	Tea Break	
1045-1145	Mitigation Strategies for Communication Systems	Chandrasekar
1145-1200	Tea Break	
1200-1300	Mitigation Strategies for Navigation Systems	Chandrasekar
1300-1400	Lunch Break	
1400-1600	Practical - Communication System Testing	Chandrasekar

DAY-11 : 18 DECEMBER 2025

Time	TOPIC	Expert's name
0930-1100	Examination / Test (Objective / Short Q/A) - for 1 hour	
1100-1115	Tea Break	

1130-1300	Military Operations and Space Weather	Chandrasekar
1300-1400	Lunch Break	
1400-1600	Campus tour with selective lab visits	

DAY-12 : 19 DECEMBER 2025

Time	TOPIC	Faculty name
0930-1030	Workshop Summary and Final Discussions	Dipankar Banerjee, IIST
1030-1045	Tea Break	
1045-1130	Feedback Discussion	
1130-1300	Closing Ceremony and distribution of certificates	
1300-1400	Lunch and Departures	