

Seminar Title	: Robust Consensus Control for Linear Descriptor Multi-Agent Systems using Output Information
Speaker	: Arnab Pal
Supervisor	: Prof. Asim Kumar Naskar
Venue	: Seminar Room (EE-205)
Date and Time	: 20 Sep 2024 (5:00 PM)
Abstract	: This work addresses the issues of robust consensus in descriptor multi-agent systems. The interaction topology among agents is considered as a directed graph and the proposed distributed consensus protocol is output feedback-based. The robust consensus control problem is reformulated through a unified framework model into a robust stability problem for a single agent. The controller gain parameters are obtained by solving a set of linear matrix equality constraints and strict linear matrix inequality constraints. These constraints are derived from the bounded real lemma. The effectiveness of the proposed methodology is illustrated through a numerical example.