

Military Technological Innovation, Arms Control and Strategic Stability

This course examines the relationship between military technological innovation, strategic stability, and arms control by following a clear thematic progression across the semester. It begins with an introductory session that maps the field and establishes the main conceptual links between technology, war, deterrence, and international security. It then moves into a first block on major technological shifts in modern warfare, tracing how particular innovations transformed strategy and the conduct of conflict. Topics in this section cover the machine gun and industrial warfare, the submarine and sea denial, rockets, satellites, and drones, allowing students to see how new technologies repeatedly altered both military practice and broader strategic environments.

The second half of the course turns to the nuclear age and the problems of strategic stability. It starts with the origins of nuclear weapons and then considers the diversity of nuclear technologies, the changing logic of counterforce and deterrence, and the role of doctrine and strategic culture. From there, the course broadens into global debates on strategic stability, including contemporary perspectives beyond the traditional U.S.–Soviet/Russian framework.

The final part of the course is organized around the historical development of arms control. It first introduces the early history of arms limitation, then focuses on the central Cold War frameworks of SALT and the ABM regime, and finally moves to later agreements and current challenges, including INF, START, and wider debates about the future of the nonproliferation order. The structure therefore takes students from military innovation to strategic theory and finally to institutional efforts to regulate the nuclear security competition.