SCO163e Impacts of Emerging Technologies

Level: 1

Credit Units: 2.5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY JAN

E-Learning: FULL - Learning is done ENTIRELY online using interactive study materials in Canvas. Students receive guidance and support from online instructors via discussion forums and emails. There are no face-to-face sessions. If the course has an exam component, this will be administered on-campus.

Synopsis:

In a world where science fiction meets reality, this multidisciplinary course introduces students to cutting-edge technologies that have been integrated in human societies and discusses their socioeconomic, socio-political, geopolitical, and cultural impacts. It relates technological development to the central issue of how humans may co-exist with new technologies, or may even become enhanced/augmented by them in the course of human evolution. It also looks at the concept of dual-use technologies and show how they blur the lines between civilian use and military application. Analyses of public policy debates related to the cutting-edge technological development provide insights into how humankind will navigate technological use in the near future.

Topics:

- The emergence of robot enhanced societies and its social impacts
- Diagnosing and hacking the human DNA
- Human enhancements
- History of the hypersonic revolution
- Space race and star wars
- Mission to Mars and its impact

Learning Outcome:

- Discuss the speed, scope and impact of advanced technological revolutions.
- Explain the socio-political and socioeconomic impacts of cutting-edge technologies.
- Relate cutting-edge new technologies to the continuing historical evolution of humankind.
- Identify the nexus and interconnections among globalisation, different platforms and technologies in development.
- Describe the political, social, and economic challenges of the emergence of hyper-advanced technologies.
- Show how states and societies can respond to these challenges.

Assessment Strategies:

Continuous Assessment Component	Weightage (%)
PRE-COURSE QUIZ	10
TUTOR-MARKED ASSIGNMENT	35
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DISCUSSION BOARD	20
Sub-Total	**100**

Examinable Component	Weightage (%)
Sub-Total	

Weightage Total   **100**