भारतीय प्रौद्योगिकी संस्थान तिरुपति

INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI

भारतीय प्रौद्योगिकी संस्थान तिरुपति

1.	Title of the course	Integrated Impact Assessment
2.	Course number	CE511L
3.	Structure of credits	3-0-0-3
4.	Offered to	PG
5.	New course/modification to	Modification To CE5023/7
6.	To be offered by	Department of Civil and Environmental Engineering
7.	To take effect from	July 2022
8.	Prerequisite	СоТ

- 9. **Course Objective(s):** Exposure to the key approaches to integrated impact assessment–environmental, social and health. To provide a basic understanding of the Environmental Impact Assessment process for planning, project evaluation, monitoring, and regulatory enforcement To understand the application of Strategic Environmental Assessment/Life Cycle Assessment/Environmental Risk Assessment, and Monitoring and Evaluation process in project planning and decision making
- 10. Course Content: Introduction and an overview of Integrated Impact Assessment (IIA) Sustainable Development challenges and need for IIA; Key Approaches of IIA and current practices, changing perspectives and debate in IIA; Environmental Impact Assessment (EIA) Environmental clearance procedures, Environmental Management Plan; EIA case study for various infrastructure and industrial projects; Social Impact Assessment, Resettlement & rehabilitation and development; Health Impact Assessment (HIA), Impact of environment on health, tools and techniques in HIA, Case Study; Emerging Dimensions & Future Directions Strategic Environmental Assessment, Environmental Risk Assessment, Life Cycle Analysis; Monitoring and Evaluation—Basic concepts, guidelines, tools, evaluation designs and its applications.

11. Textbook(s):

- 1. Canter L C, Environmental Impact Assessment, McGraw Hill, (1996).
- 2. Matthews H S, Hendrickson C T, Matthews D H, Life Cycle Assessment: Quantitative Approaches for Decisions That Matter, Self-Published, (2015).
- 3. Vanclay F, Bronstein D A, Environmental and Social Impact Assessment, Wiley, (1995).

12. Reference(s):

- 1.Dale R, Environmental Impact Assessment, SAGE (2004).
- 2. Lee N, Kirkpatrick C, Integrated Appraisal and Sustainable Development in a Developing World, Edward Elgar, (2000).
- 3. Marelize G, Jody Z K, Making Monitoring and Evaluation Systems Work: A Capacity Development Toolkit, World Bank, (2009).