**Title of the Course: Environmental Impact Assessment I**

**Course Code:** ESC-106 **Number of Credits:** 01

**Total Contact Hours:** 12 **Effective from AY:** 2021-22

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| **Prerequisites for the course:** | There is no prerequisite for this course apart from the programme requirements | |
| **Objective:** | In order to overcome the problems of environmental degradation, it is very necessary to plan the development process in a sustainable manner so that control and mitigation measures can be undertaken prior to occurrence of degradation. One important tool to do this is carrying out Environmental Impact Assessment. Hence, knowledge of this subject is very important for an environmental engineer. | |
| **Content:** | **Module 1: Introduction to the Environmental Impact Assessment process**<br>• **Introduction and principals:** Introduction; nature and purpose of EIA; Project, Environment and nature of Impacts; Changing perspective and current issues in EIA; EIA regulations.<br>• **Starting up early stages:** Managing the EIA process; project screening, scoping; understanding the project/development action; establishing the environmental baseline; impact identification.<br>• **Participation, presentation and review:** Impact prediction; Evaluation; mitigation and enhancement; public consultation and participation; the importance of monitoring and auditing in the EIA process; Monitoring and auditing practice; EIA presentation and review.<br>• **Practice and prospects:** Legal Challenges, cost and benefits of EIA; Case studies of EIA in practice; strategic environmental assessment; extending EIA to project implementation. | 12 hours |
| **Pedagogy:** | Lectures/assignments/workshops/ street play/brain storming sessions/outreach programmes/campus walks/documentaries and discussion/ presentations | |
| **References/ Readings** | 1. Glasson, J., Therivl, R., & Chadwick, A. (2005). *Introduction to environmental impact assessment*. Routledge, Taylor & Francis Group.<br>2. Arts, J., & Morrison-Saunders, A. (Eds.). (2012). *Assessing impact: Handbook of EIA and SEA follow-up*. Routledge, Taylor & Francis Group.<br>3. Abaza, H., Bisset, R., & Sadler, B. (2004). *Environmental Impact Assessment and Strategic Environmental Assessment: Towards an Integrated approach*. UN Environmental Program.<br>4. Therivel, R., & Wood, G. (Eds.). (2017). *Methods of environmental and social impact assessment*. Routledge, Taylor & Francis Group.<br>5. Morris, P., & Therivel, R. (Eds.). (2001). *Methods of environmental impact assessment, 2*. Taylor & Francis. | |
| **Learning** | After learning the course the students should be able to: | |

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| **Outcomes** | 1. Explain the need for EIA<br>2. Define EIA<br>3. Demonstrate the understanding of concept of Sustainable Development and justify the methods of achieving SD.<br>4. Appreciate the importance of EIA as an integral part of planning process.<br>5. Apply the different methodologies to predict and assess the impacts of minor/major projects on various aspects of environment.<br>6. Enumerate the role of public participation in environmental decision making process.<br>7. Characterize the environmental attributes. | |