UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (UN SDGS)

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INTENDED AUDIENCE : Students, Scholars, Anyone with affinity towards environmental sciences and sustainable development studies.

INDUSTRY SUPPORT : Manufacturing sector/ Waste management/Energy/Governance/Policy

COURSE OUTLINE :

UN SDGs are a roadmap for a paradigm shift in the prevalent economic model. The course tries to establish the underlying understanding behind this UN-led initiative, the value of sustainable development, how it touches our lives, and the efforts required to achieve them. The course intends to elaborate on the evolution of scope under the dynamic concept of sustainability and UN SDGs-led cohesive societal framework to evolve a resilient community worldwide. The course elaborates on seventeen UN SDGs, mapping their systemic perspectives and the need for tomorrow. It talks about the interconnectedness of the planet, products, processes wrt SDGs. It touches on the Paris agreement on climate change, India's participation in it, and its commitment to SDGs. It also shows a glimpse of innovation-led design processes to undertake challenges in its path. The course uses case studies from India and international examples to better understand issues, approaches, and solutions. The newly developed course is framed using state-of-the-art studies, policy documents, reports, and research works.

ABOUT INSTRUCTOR :

Prof. Shiva Ji is a practicing Architect, and Assistant Professor in Department of Design and Department of Climate Change, IIT Hyderabad, India. He is part of Rural Development Center also. He has attained B.Arch, M.Des, MBA and PhD in sustainability assessment methods in built environments from IIT Guwahati, India. He has over 13 years of cumulative experience in industry and academics. He has accomplished several projects in the field and has over 39 designs launched in the market. His publications can be seen on his website (https://www.iith.ac.in/~shivaji/). His research areas include design for environmental studies, sustainability, sustainability assessment, virtual & augmented reality, architectural heritage reconstruction using technology. He is involved with many research projects using state of the art technology in domains of architecture and design. He is a member with several national and international organizations and has chaired various technical sessions, working on review panels, and conferences, etc.

COURSE PLAN :

- Introduction, *United Nations and a World in Order, *Scenario of Current Model of Growth and Development *Need for Change
- Definition of Sustainability, *Aspects of Sustainability, *Transition from MDGs to SDGs
- The Role of UN and the Need for SDGs and Adoption by the World
- Scope and Inclusion and Agenda 2030, *Our Common Future and Philosophy behind SDGs
- Distinction between Development and Sustainable Development
- Circular economy, *Design for sustainability, *Thinking Alternatives and Innovation
- Causal Mapping, *Systemic Mapping and Problem Identification
- Identifying probable interventions for SD, *Framework and Structuring of Seventeen SDGs
  SDG 1: No Poverty
  SDG 2: Zero Hunger
  SDG 3: Good Health and Well-being
  SDG 4: Quality Education
  SDG 5: Gender Equality
  SDG 6: Clean Water and Sanitation
  SDG 7: Affordable and Clean Energy
  SDG 8: Decent Work and Economic Growth
  SDG 9: Industry, Innovation and Infrastructure
  SDG 10: Reduced Inequality
  SDG 11: Sustainable Cities and Communities
  SDG 12: Responsible Consumption and Production
  SDG 13: Climate Action
  SDG 14: Life Below Water
  SDG 15: Life on Land
  SDG 16: Peace and Justice Strong Institutions
  SDG 17: Partnerships to achieve the Goal

- *Interrelationships and Connections between Seventeen SDGs *SDG Structure and Order at Levels of People (SDG 1 - 10), Ecological (SDG 11 - 15) and Spiritual (SDG 16 - 17)
- *SDGs and Socio Ecological Systems: Economy SDGs 8, 9, 10, 12; Society SDGs 1, 2, 3, 4, 5, 7, 11, 16; Biosphere SDGs 6, 13, 14, 15
- *Financing the SDGs and Global Funds, *Implementation Planning, *Capacity Building and Finance
- *Climate Change Conferences and Summits such as Rio Earth Summit 1992, Kyoto Protocol 1995, Paris Agreement 2015, COP 26 2021, etc.
- *Case Studies from around the World, *Implementation at International Level, *Global Reports
- *Case studies from India, *Implementation at National Level, *National Reports
- *Nodal Agency for Implementation in India, *Effective Strategy for Implementation in Indian Scenario, *State Level Reports *Assessment of Implementation and Checking its Effectiveness
- *Summary