| Course title: Computing Tools and AI Applications in Energy Sector | | | |
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| Course code: DSE 124 | No. of credits: 3 | L-T-P:10-14-42 | Learning hours: 66 |
| Pre-requisite course code and title (if any): NA | | | |
| Department: Sustainable Engineering | | | |
| Course coordinator: Dr Ramkishore Singh | | Course instructor(s): Dr Ramkishore | |
| | | Singh, Dr Sapan Thapar | |
| Contact details: ramkishore.singh@terisas.ac.in | | | |
| Course type: Elective | | Course offered in: Semester 3 | |

Course description:

This course has been designed to make the students versed about energy systems, technologies and building modelling, simulation and optimizations. Further, students will learn about artificial intelligence techniques and they will be able to implement artificial intelligence in the energy sector for predictive maintenance, forecasting of solar radiation, solar power generation, demand management etc.

Course objectives:

- 1. To get students learn and remember to operate various simulation and analysis software used for design, analysis and modelling renewable energy systems and technologies.
- 2. To learn, understand the process of building thermal modelling and simulation.
- 3. To learn, understand and implement artificial intelligence techniques for different applications in energy sector.