EN7918     Applied Heat Transfer

Course Aim: To equip students with knowledge and practical experience in heat transfer engineering in industrial applications.

Short Title: Applied Heat Transfer
Faculty: EDICT
Credits: 15
Pre-requisites: EN6110 (or ENB5110) or EN7919 (or ENB6919)
Co-requisites: None
Anti-requisites: ENB6916

Learning Outcomes:

1. Demonstrate advanced knowledge of the modes of heat transfer to solve practical industrial heat transfer problems.
2. Critically analyse and evaluate heat transfer in mixed mode situations, with emphasis on Conduction-Convection modes in practical project settings.
3. Contrast methods governing the enhancement of heat transfer in various designs, and apply optimisation techniques.
4. Critically analyse the different types of heat exchanger applications, and solve practical industrial heat exchanger problems.
5. Apply appropriate heat transfer techniques to real applications, and design systems for industrial use.

Version 3
Effective From: September 1, 2016
Indicative NQF Level: 7
Student Contact hrs: 90
Self-directed hrs: 60
Other directed hrs: 0
Total learning hrs: 150

NQF Sub-strand:
Theoretical
Understanding
Practical
Application of knowledge
Theoretical
Understanding
Practical
Application of knowledge
Autonomy, Responsibility, Context