Course Aim
To give students knowledge of, and practical skills in, fluid mechanics; including fluid statics, fluid dynamics, flow measurement, hydraulic and pneumatic systems.

Short Title Fluids
Faculty EDICT
Credits 15
Pre-requisites EN6907 (or ENB5907)
Co-requisites None
Anti-requisites ENB5109 or ENB6911

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

Learning Outcomes
On successful completion of this course, students will be able to:

1. Demonstrate advanced understanding of static fluid concepts.
2. Apply the Bernoulli Equation and the associated energy equations to solve advanced fluid momentum transfer problems.
3. Use specialist level skill to specify suitable pumps, fans and compressors for industrial use.
4. Demonstrate advanced knowledge and understand of the operation of hydraulic and pneumatic systems and associated equipment.
5. Propose solutions to advanced hydraulic and pneumatic applications.

EN7917 Fluid Mechanics

EN6907 (or ENB5907)
None
ENB5109 or ENB6911

Theoretical Understanding
Practical Application of knowledge
Generic, Problem Solving and Analytical Skills
Practical Application of knowledge
Autonomy, Responsibility, Context

Total learning hrs
150

Self-directed hrs
90

Student Contact hrs
60

Other directed hrs
0