

EN7917

## Fluid Mechanics



**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**

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

**Outcomes**

- 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.

**NQF Sub-strand**

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