



### Course Description

#### Legend

Course Title	[A – B – C]	Course #:	Prereq.:
--------------	-------------	-----------	----------

**A:** Theoretical hrs

**B:** Practical hrs

**C:** Credit hrs

### Third: Specialized requirements (109 hours)

#### A. Compulsory requirements (100 hours)

Wind Energy [3 – 0 – 3]	Course #:0906454	Prereq: 0906353+0904364
This course aims to Introduce students to wind and wind power history, Structure of the wind turbine, Impact of tower height. Maximum rotor efficiency and wind turbine generators. Turbine aerodynamics (how wind turbine works). Average power in the wind. Wind turbine electrical capacity. Wind power probability density function, Weibull, and Rayleigh statistics. Wind farms. Specific wind turbine performance calculation. Environmental concerns: noise, view, and landscape.		