

1. Title	Crane wind load calculation		
2. Code	EMPEDE501A		
3. Range	Calculate the wind load of various types of cranes used in general industrial plants, power plants or other places.		
4. Level	5		
5. Credits	6		
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Basic theories of fluid mechanics</p> <ul style="list-style-type: none"> ◆ Know about the basic concepts of fluid mechanics including: <ul style="list-style-type: none"> • Fluid statics • Ideal fluid movement • Viscous fluid movement • Fluid movement score • Fluid vortex movement ◆ Know about the effect of wind force on cranes <p>6.2 Calculation of crane's wind force</p> <ul style="list-style-type: none"> ◆ Calculate the load of wind force on a crane according to the crane's external structure and theories of fluid mechanics ◆ Calculate the wind load of the crane in different conditions <p>6.3 Professional analysis of crane wind load</p> <ul style="list-style-type: none"> ◆ Assess the effect of wind load on the crane in different conditions, and assist the management in formulating relevant operation guide 		
7. Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <p>(i) Capable to calculate the wind load of the crane in different conditions.</p>		
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses basic knowledge of fluid mechanics and wind load calculation.		