

# Qualification Unit

This unit forms part of a regulated qualification.

**Unit Title:** Interpret Meteorology in the Near Coastal Area

**Unit Reference Number:** K/651/5447

**Level:** Three (3)

**Credit Value:** Five (5)

**Minimum Guided Learning Hours:** 45

Learning Outcome (The Learner will):	Assessment Criterion (The Learner can):
1. Understand how to make meteorological observations	1.1 Explain the use of meteorological instruments including: <ul style="list-style-type: none"> <li>• Aneroid barometers</li> <li>• Barograph</li> <li>• Mason’s hygrometer</li> <li>• Marine (Stevenson’s) screen</li> <li>• Whirling psychrometer</li> <li>• Sea temperature apparatus</li> </ul>
	1.2 Explain the Beaufort wind scale
	1.3 Explain principles of non-instrumental observations including: <ul style="list-style-type: none"> <li>• Waves</li> <li>• Wind</li> <li>• Horizontal visibility</li> <li>• Cloud types</li> </ul>
	1.4 Summarise weather services available to shipping
2. Understand meteorological processes	2.1 Explain characteristics of the troposphere
	2.2 Explain causes of geostrophic wind and surface wind
	2.3 Explain causes of surface wind
	2.4 Explain the formation of clouds and precipitation

	2.5 Explain the causes of reduced horizontal visibility
3. Understand synoptic charts	<p>3.1 Explain weather associated with air masses affecting north Europe including:</p> <ul style="list-style-type: none"><li>• Polar</li><li>• Tropical</li><li>• Arctic</li><li>• Antarctic</li></ul> <hr/> <p>3.2 Explain the weather associated with synoptic patterns and features including:</p> <ul style="list-style-type: none"><li>• Depressions (frontal, families and secondary)</li><li>• Non frontal depressions</li><li>• Anticyclones</li><li>• Ridges of high pressure</li></ul>