



# Identify, analyse and evaluate psychrometric heating and cooling processes and climate



<i>Competency Unit</i>	AMV100	Identify, analyse and evaluate psychrometric heating and cooling processes and climate
<i>Description of Unit</i>	This course provides the student with an advanced understanding of heating and cooling processes and psychrometry (which is a foundation stone for all environmental engineering and also human heat stress). The impact of surface climate and the selection of appropriate surface climate temperatures and methods of analysis and the interaction with underground design temperatures and legislative requirements are explained.	
<i>Applicable to</i>	Technical and medical personnel who need to understand the factors that influence heating and cooling processes, workplace temperatures and humidity or human heat stress during routine or egress conditions (including engineers, regulators, occupational hygienists or paramedics).	
<i>Method of delivery</i>	1-day workshop with subsequent assignment(s).	
<i>Assessments</i>	Workplace psychrometric and climate analysis evaluation, calculations and report.	
<i>Locations</i>	Brisbane or Mackay. Also available at other locations at additional cost ( <i>see below</i> ).	
<i>Course presenter</i>	Dr Rick Brake	Dr Rick Brake is a Chartered Practicing Mining Engineer with 25 years experience in underground and open cut mines in senior planning and operating roles in Australia and North America. He graduated with First Class Honours in Mining Engineering from the University of Queensland in 1979, completed a Master of Business Administration from Deakin University in 1991 and completed a PhD in physiology from the School of Public Health at Curtin University in the area of human heat stress in 2002. He has a First Class Mine Manager's Certificate of Competency (Qld) and is a Fellow of the AusIMM, a member of MICA and the MVSSA, an RPE(Qld) and has consulted widely and published extensively in the areas of mine ventilation, cooling and refrigeration, heat stress and egress & entrapment.
<i>Hardware/ software requirements</i>	Laptop with Windows™ and Microsoft Excel™	Special 90-day fully-functional and latest version of HotWork™ provided in tuition fees.
<i>Required text books and facilities</i>	Access to a range of workplaces with varying environmental conditions for measurements and calculations.	
<i>Fees (\$AUD)</i> <i>[subject to change without notice]</i>	\$1,000 (no GST payable)	
<i>Conditions</i>	Fees apply for Brisbane and Mackay. Courses can be run at other locations. Additional fees may apply. All courses are subject to maximum and minimum registrations.	
<i>Further Information</i>	TAFE Queensland Mining Services Phone: 1300 653 050 +61 7 4920 2654 Email: <a href="mailto:TQMining@det.qld.gov.au">TQMining@det.qld.gov.au</a>	Mine Ventilation Australia Phone: +61 7 3269 3733 Email: <a href="mailto:mvamail@mvaust.com.au">mvamail@mvaust.com.au</a>