

**Specification of Competency Standards**  
**for the Printing and Publishing Industry**  
**Unit of Competency**

1. Title	Master use of printing machinery
2. Code	PPPRPM401A
3. Level	4
4. Credit	12
5. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>5.1 Master effect of printing machine properties on material, printing ink, plate, etc</p> <ul style="list-style-type: none"> <li>◆ Master major lithographic printing including mechanical workings and maintenance procedure for sheet-fed and web-fed printing machines</li> <li>◆ Master design theory and mechanical structure of lithographic, intaglio, relief and screen printing presses</li> <li>◆ Analyze effect of major printing materials, printing ink and plate on finished print products in major printing</li> <li>◆ Master effect of supplementary materials needed for major printing on printing machine</li> <li>◆ Understand effect of press room temperature and humidity on materials and printing flow</li> </ul>

5.2 Master  
electromechanical  
design of  
registration  
system and  
colour  
adjustment and  
control

- ◆ Master techniques for adjusting position of print image
- ◆ Identify registration system and colour adjustment in lithographic, intaglio, relief and screen printing
- ◆ Master registration system of major printing facilities
- ◆ Understand basic mechanical design of major printing machines
- ◆ Understand effect of press room temperature and humidity on registration

	<p>5.3 Master optimization of mechanical /electronic workings</p> <ul style="list-style-type: none"> <li>◆ Understand development trend of latest mechanical / electronic technology used in printing machine</li> <li>◆ Compare major mechanical / electronic technological support for lithographic, intaglio, relief and screen printing</li> <li>◆ Understand positioning of major mechanical/electronic technology</li> <li>◆ Understand automation design of major mechanical / electronic technology</li> <li>◆ Master mechanical / electronic workings for product, manpower and environment optimization</li> </ul> <p>5.4 Execute quality and productive operation</p> <ul style="list-style-type: none"> <li>◆ Exercise quality and productive operation by controlling machine for production based on the effect of printing materials, supplementary printing materials, press room temperature and humidity on the quality and production volume of print products</li> </ul>
6. Range	Exercise quality and productive operation by controlling production machines in printing production department.
7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <p>(i) Able to exercise quality and productive operation by controlling machines for production based on the effect of printing materials, supplementary printing materials, press room temperature and humidity on the quality and production volume of print products.</p>

8.Remarks	The credit value of this unit of competency is based on the assumption that the learner has knowledge of printing machinery workings.
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