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| Training Package | N/A | HSC Indicative Hours 10 |
| Title | Manufacturing, engineering and related services industries induction | |
| Unit descriptor | This is not an industry-developed unit of competency. It is a set of topics to address as part of a student's induction to working within the manufacturing, engineering and related services industries. | <p style="text-align: center;">HSC Requirements and Advice</p> <p>Key Terms and Concepts</p> <ul style="list-style-type: none"> • anti-discrimination • apprenticeship and traineeship • basic research skills • bullying and harassment • businesses • career opportunities and pathways • current trends • domestic and international markets • emerging technology • employment and income statistics • employment conditions • enterprise and workplace agreements • environmental issues • environmental strategies • equal employment opportunity (EEO) • inappropriate conduct • industrial awards • industrial relations issues • industry bodies • learning needs • industries/sectors within 'manufacturing, engineering and related services industries' • on-the-job and off-the-job training • personal attributes • products and services • sources of industry information • vocational streams • work ethic. |

| Topics | HSC Requirements and Advice |
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| 1 Industry work context and setting | <p>Learning experiences for the HSC must address:</p> <p>Basic research skills for:</p> <ul style="list-style-type: none"> • identification of relevant information • questioning techniques to obtain information • sorting, summarising and presenting information. <p>An awareness of sources of current industry information including:</p> <ul style="list-style-type: none"> • industry associations and organisations • unions • industry journals • media • the internet • libraries • reference manuals • policy and procedure manuals • personal observations and experience • industry contacts, mentors and experience • colleagues, supervisors/team leaders and managers • professional development opportunities • industry functions. <p>An awareness of the industries (and their sectors) within the ‘manufacturing, engineering and related services industries’ including:</p> <ul style="list-style-type: none"> • metal, engineering and manufacturing • aeroskills <ul style="list-style-type: none"> - aircraft manufacture - aircraft maintenance - space - training • boating <ul style="list-style-type: none"> - marine craft (boats and ships) construction - boating services - tourism. <p>A basic knowledge of the industries/sectors including:</p> <ul style="list-style-type: none"> • the primary role and service/s offered by each • the interrelationship between industries/sectors. <p>An awareness of various businesses within the industries/sectors of the ‘manufacturing, engineering and related services industries’ including:</p> <ul style="list-style-type: none"> • metal <ul style="list-style-type: none"> - fabrication |

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| | <ul style="list-style-type: none"> - machining - manufacturing • electrical equipment and appliance manufacturing, maintenance and repair • industrial machinery and equipment manufacturing, maintenance and repair • transport equipment manufacturing, maintenance and repair • shipwright <ul style="list-style-type: none"> - build - repair and maintenance • boating <ul style="list-style-type: none"> - sales, retail and chandlery - boat servicing - marina and slipway operations - charter operations and hire - manufacture of trailers, sails and other accessories • jewellery and horological <ul style="list-style-type: none"> - design - manufacturer - repair and maintenance • locksmith. <p>An awareness of the following in relation to the manufacturing, engineering and related services industries (as a whole) in Australia including:</p> <ul style="list-style-type: none"> • statistics <ul style="list-style-type: none"> - employment - income • current trends. <p>A basic awareness of current issues of concern to the manufacturing, engineering and related services industries relating to:</p> <ul style="list-style-type: none"> • government initiatives • political climate • skills shortage • globalisation • public liability • risk management • emerging technologies. <p>A basic understanding of the effects of emerging technology on:</p> <ul style="list-style-type: none"> • current work practices/productivity • employment • work methods/techniques • market conditions/new markets • cost-effectiveness. |

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| 2 Career opportunities | <p>Learning experiences for the HSC must address:</p> <p>An awareness of vocational streams [as outlined in the Metal and Engineering Training Package (MEM05)] within the manufacturing, engineering and related services industries including:</p> <ul style="list-style-type: none"> • engineering <ul style="list-style-type: none"> - production technology - production systems - mechanical trade - fabrication trade - electrical/electronic trade - technician • boating services • jewellery manufacture • locksmithing • marine craft construction. <p>A basic knowledge of career pathways for a specific industry area/sector within the manufacturing, engineering and related services industries and knowledge and skills required for different job roles.</p> <p>Self-reflection skills including:</p> <ul style="list-style-type: none"> • recognition of current knowledge and skills • identification of <ul style="list-style-type: none"> - knowledge and skills required for current job - knowledge and skill gaps - learning opportunities to meet potential learning needs and fulfil career aspirations. <p>Recognition of learning as an on going process and an awareness of opportunities to meet learning needs including:</p> <ul style="list-style-type: none"> • on-the-job and/or off-the-job training • seminars/workshops/courses • multiskilling/job rotation in current workplace • mentoring programs. <p>An understanding of the difference between:</p> <ul style="list-style-type: none"> • an apprenticeship • a traineeship. <p>Evidence of learning including:</p> <ul style="list-style-type: none"> • transcript/qualification/ticket/licence • work diary • supervisor and/or team leader's report/evaluation/appraisal • competency record • learning portfolio. |

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| <p>3 Employment conditions, responsibilities and obligations</p> | <p>Learning experiences for the HSC must address:</p> <p>A basic knowledge of employment conditions within the manufacturing, engineering and related services industries including:</p> <ul style="list-style-type: none"> • industrial awards • enterprise agreements • workplace agreements. <p>Personal attributes and work ethics of an employee within the manufacturing, engineering and related services industries including:</p> <ul style="list-style-type: none"> • attendance and punctuality • ethical behaviour • honesty • work performance • taking directives • attention to detail • personal presentation • attitude • confidentiality • consistency of service • safe work practices. <p>An awareness of current industrial relations issues affecting the manufacturing, engineering and related services industries.</p> <p>A basic understanding of the primary role/function of industry bodies including:</p> <ul style="list-style-type: none"> • employer groups <ul style="list-style-type: none"> - Australian Industry Group (Ai-G) • unions/employee groups <ul style="list-style-type: none"> - Australian Council of Trade Unions (ACTU) - NSW Labour Council - Australian Workers Union (AWU) - Australian Manufacturing Workers Union (AMWU) • professional associations [as applicable to a specific industry area/sector within the manufacturing, engineering and related services industries, for example, Boating Industry Association (BIA) or Jewellers Association of Australia (JAA)] • training <ul style="list-style-type: none"> - Manufacturing Skills Australia (MSA). <p>A basic understanding of the principles of equal employment opportunity (EEO) legislation:</p> <ul style="list-style-type: none"> • <i>Equal Employment Opportunity (Commonwealth Authorities) Act 1987</i> (Cth) • <i>Equal Opportunity for Women in the Workplace Act 1999</i> (Cth). <p>A basic understanding of the principles of anti-discrimination legislation:</p> <ul style="list-style-type: none"> • <i>Anti-Discrimination Act 1977</i> (NSW) • <i>Sex Discrimination Act 1984</i> (Cth) |
| | <ul style="list-style-type: none"> • <i>Racial Discrimination Act 1975</i> (Cth) |

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| | <ul style="list-style-type: none"> • <i>Disability Discrimination Act 1992 (Cth)</i> • <i>Age Discrimination Act 2004 (Cth)</i>. <p>Reciprocal rights and responsibilities of employers and employees in relation to EEO and anti-discrimination.</p> <p>An awareness of the different forms of bullying and harassment in the workplace including:</p> <ul style="list-style-type: none"> • sexual • verbal • physical • psychological. <p>An awareness of:</p> <ul style="list-style-type: none"> • workplace policies and procedures designed to prevent discrimination and harassment in the workplace • the legal ramifications of inappropriate workplace conduct • recourse in the event of inappropriate conduct <ul style="list-style-type: none"> - reporting complaints - grievance procedures - disciplinary action. |
| <p>4 Manufacturing, engineering and related services industries and the environment</p> | <p>Learning experiences for the HSC must address:</p> <p>A basic awareness of current environmental issues including:</p> <ul style="list-style-type: none"> • sustainability • waste management • energy usage/efficiency • water resource management • conservation • natural resource management • recycling. <p>Strategies for minimisation of potential negative environmental impacts including:</p> <ul style="list-style-type: none"> • environmental hazard identification and risk minimisation and reporting • minimisation strategies <ul style="list-style-type: none"> - regular maintenance of machinery and equipment - use of biodegradable/non-toxic materials - habitat protection • waste minimisation <ul style="list-style-type: none"> - accurate measurements and calculations - recycling - using recyclable products - resource efficiency • improvement strategies |
| | <ul style="list-style-type: none"> • environmental monitoring • emergency procedures. |

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| | <p>A basic understanding of the primary role/responsibility of:</p> <ul style="list-style-type: none"> • the NSW Department of Environment and Conservation [incorporating Environment Protection Authority (EPA)] • local government. <p>A basic understanding of the role of environmental guidelines and legislation in the operation of a business within the manufacturing, engineering and related services industries.</p> |