



Smart Nation

Staff Training & Development

Phone: 1300 307 908

Fax: 1300 308 046

Email: enquiry@smartnation.com.au



Advanced Diploma of Engineering – Fact Sheet

Students undertaking this qualification will be engaged in the following work areas

- *production planning, including scheduling,*
- *works study estimating materials,*
- *handling systems,*
- *design and drafting including Computer Aided Drafting(CAD) & Design,*
- *inspection,*
- *quality control,*
- *design and development work (prototypes, models, specifications) in both product and process areas.*

In partnership with the leading TAFE Institute for Trade and Technician training, is able to offer an attractive package to people seeking Diplomas and Advanced Diplomas in Engineering, utilising Queensland State Government funding to subsidise course costs.

The training can be done flexibly at:

- *a work site,*
- *through distance education,*
- *online or*
- *in our continuous enrolment tutorials held at Murarrie, Eagle Farm or Acacia Ridge classrooms.*

MEM60105

Total Units 30

MANDATORY UNITS

Communication

MEM16006A Organise and communicate information

MEM16008A Interact with computing technology

Management & organisation

MEM22001A Perform engineering activities

MEM22002A Manage self in the engineering environment

Engineering technician

MEM30007A Select common engineering materials

MEM30012A Apply mathematical techniques in a manufacturing engineering or related environment

Stream Units



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Engineering technician

- MEM30001A Use computer aided drafting systems to produce basic engineering drawings
- MEM30002A Produce basic engineering graphics
- MEM30003A Produce detailed engineering drawings
- MEM30004A Use CAD to create and display 3D models
- MEM30005A Calculate force systems within simple beam structures
- MEM30006A Calculate stresses in simple structures
- MEM30008A Apply basic economic and ergonomic concepts to evaluate engineering applications
- MEM30009A Contribute to the design of basic mechanical systems

SPECIALISATION UNITS

Drawing, drafting & design

- MEM09005B Perform basic engineering detail drafting
- MEM09141A Represent mechanical engineering designs
- MEM09151A Apply computer aided modeling and data management techniques to mechanical engineering designs

Planning

- MEM14061A Plan and design mechanical engineering projects
- MEM14081A Apply mechanical engineering fundamentals to support design and development of projects

Management & organisation

- MEM22004A Manage engineering projects
- MEM22007A Manage environmental effects of engineering activities

Engineering science

- MEM23001A Apply advanced mathematical techniques in a manufacturing engineering or related environment
- MEM23003A Operate and program computers and/or controllers in engineering situations
- MEM23041A Apply basic scientific principles and techniques in mechanical engineering situations
- MEM23051A Apply basic electro and control scientific principles and techniques in mechanical and manufacturing engineering situations
- MEM23061A Select and test mechanical engineering materials
- MEM23071A Select and apply mechanical engineering methods, processes and construction techniques
- MEM23081A Apply scientific principles and techniques in mechanical engineering situations
- MEM23091A Apply mechanical system design principles and techniques in mechanical engineering situations
- MEM23093A Apply plant and process design principles and techniques in engineering situations

Contact us to find out more on 1300 307 908 or paddy@smarnation.com.au

Ask for Paddy Warfield



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