Skillset Course 1

Vibration Engineering

This skillset program is designed for novice Mechanical Engineers aspiring to a career in design and / or condition monitoring.

The course will cover:

- Understanding the basics of vibration engineering and dynamics of vibration loads
- Static and dynamic balancing of rotating masses
- Online and offline monitoring of machines and equipment
- Primary and secondary signals (dynamic signals, tribiological signals)
- Different types of condition monitoring techniques
- Types of vibration measuring systems
- Carrying out fixed plant condition monitoring through the implementation and use of vibration inspections
- Vibration data collection and analysis
- Standards for vibration monitoring - AS 2625 Part 1 SEVERITY GUIDELINES
- ISO general standards for vibration severity (10816-1:1995).

ELIGIBILITY:
Diploma / Advance Diploma / Degree in Mechanical Engineering

COURSE DURATION:
Flexible timing, 5 week classes
35 hours total

AIME has designed a series of skillset short course programmes for existing practitioners to update or increase their skill levels.

The courses run for five weeks in the evenings to permit existing employees to obtain the training without interrupting their daily work routines.

The courses can also be run for companies to train their existing employees.

Courses can be run flexibly to fit in with work schedules.

For more information contact AIME on **9399 6007**, via email **info@aime.wa.edu.au** or through the webpage **aime.wa.edu.au**

It's your career, aim high™.

Australian Institute of Maintenance Engineering

13 Hensbrook Loop, Forrestdale Western Australia 6112
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Skillset Course 2

Shaft Alignment and Balancing of Rotating Masses

This skillset program is designed for maintenance technicians.

The course will cover:

- Introduction to alignment of rotating shafts, causes of misalignments and types of misalignments such as angular misalignments
- Parallel misalignments and axial misalignments (end float)
- Shaft centreline relationship
- Correcting for shaft misalignment
- Pre-start checks before correcting any misalignments
- Reverse indicator alignment graphic analysis
- Face and rim alignment graphic analysis and across the flex element graphic analysis
- Practical session with hands on exposure using laser alignment tool to align shafts
- Introduction to co-planer system of forces, force analysis
- Static and dynamic balancing
- Single and multi-plane balancing of rotating shafts
- Precision balancing and techniques using phase shift
- Balancing standards
- Balance quality grades for various groups of rigid rotors
- Practical session with hands on exposure using a balancing machine.

ELIGIBILITY:
Maintenance Technicians / Mechanical Fitters

CERT IV / Diploma / Advance Diploma / Graduate Engineers

COURSE DURATION:
Flexible timing, 5 week classes
30 hours total

AIME has designed a series of skillset short course programmes for existing practitioners to update or increase their skill levels.

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