

# Handbook 2020

## Coursecode

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M1305

INDUSTRIAL CONTROL SYSTEMS ENGINEERING (ME+MIT)

**Murdoch University**

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#### **Cancellation of Courses, Majors, Minors and Units**

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#### **Alternative Formats**

Handbook home page:

<http://handbook.murdoch.edu.au>

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Group	Course	Offerings
Engineering	Industrial Control Systems Engineering (ME+MIT)	• Murdoch campus (internal)

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## ENGINEERING

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### INDUSTRIAL CONTROL SYSTEMS ENGINEERING (ME+MIT)

#### **Admission Requirements (Onshore):**

AS per course.

This major in Industrial Control Systems Engineering is intended for practising professionals who wish to update their existing qualifications and/or enhance their skills in the areas of instrumentation, industrial computer systems, and control engineering. The major covers the design, modelling and operation of advanced measurement, control and industrial computer systems, the application of industrial instrumentation and communication technologies, and the design, commissioning and testing of PLC systems.

#### **Main Research Areas:**

Control theory, control systems, robotics and automation, industrial electronics, signal processing

#### **Employment Prospects:**

Graduates can find employment in manufacturing, medical, mining, processing, energy supply, communications, electronics, computer-systems and defence-related industries.

Course Codes: M1305

Environmental Engineering

#### **Availability:**

- Murdoch campus (internal)

### **Major Structure - 24 credit points**

#### **Required Units - 24 credit points**

ENG501 PLC Applications - 3 points

MURDOCH: S1-internal

ENG525 Instrumentation and Control I - 3 points

MURDOCH: S1-internal, S2-internal

ENG608 Communications, Measurement and Control - 3 points

MURDOCH: S1-internal

ENG609 SCADA and Industrial Control Systems - 3 points

MURDOCH: S2-internal

ENG691 Hazard, Risk and Project Management - 3 points

MURDOCH: S1-internal, S2-internal

ENG670 Measurement and Uncertainty Analysis - 3 points

MURDOCH: S2-internal

ENG610 Engineering Design Project - 6 points

MURDOCH: H-internal, S1-internal, S2-internal, SUM-internal, Y-internal

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## PREREQUISITES

#### **Communications, Measurement and Control (ENG608)**

Enrolment in the Master of Engineering or the Master of Engineering and MBA or Master of Engineering and MIT.

#### **Engineering Design Project (ENG610)**

Enrolment in the Master of Engineering or Graduate Diploma in Engineering or MBA+ME or ME+MIT

#### **Hazard, Risk and Project Management (ENG691)**

Enrolment in the Master of Engineering, Graduate Diploma in Engineering OR the ME/MIT.

#### **Instrumentation and Control I (ENG525)**

Enrolment in Master of Engineering or Graduate Diploma in Engineering.

#### **Measurement and Uncertainty Analysis (ENG670)**

Enrolment in the Master of Engineering or Graduate Diploma in Engineering or permission of the Engineering Academic Chair

#### **PLC Applications (ENG501)**

Enrolment in the Master of Engineering or Graduate Diploma in Engineering or MBA+ME or ME+MIT.

#### **SCADA and Industrial Control Systems (ENG609)**

ENG501 PLC Applications and ENG525 Control Systems