

# Handbook 2020

**Coursecode**

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C1152

GRADUATE CERTIFICATE IN SYSTEMS MEDICINE

**Murdoch University**

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Correct as at: 29 February 2020 at 6:19am

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

The University reserves the right to cancel, without notice, any course, major, minor or unit if the number of students enrolled falls below limits set by the University or in other unforeseen circumstances.

#### **Alternative Formats**

Handbook home page:

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

This publication can also be provided in alternative formats by contacting the Equity and Social Inclusion Office at Murdoch University

Telephone: (08) 9360 6084

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<http://goto.murdoch.edu.au/EquitySocialInclusion>

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Group	Course	Offerings
<b>Graduate Coursework Degrees and Professional Doctorates</b>		
Systems Medicine	Graduate Certificate in Systems Medicine (GradCertSysMed)	• Not currently available to new admissions

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## SYSTEMS MEDICINE

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### GRADUATE CERTIFICATE IN SYSTEMS MEDICINE (GRADCERTSYSMED)

#### Graduate Research

Graduate Certificate in Systems Medicine (GradCertSysMed)

Course Codes: C1152

Restriction: All graduate courses are subject to restriction.

Duration: 6 months full-time or part-time equivalent

#### Availability:

- Not currently available to new admissions

This 6-month Graduate Certificate course is designed to train students in omics science technologies. Students will gain extensive theoretical knowledge and practical experience from researchers at the forefront of systems medicine. On completion of this course, graduates will have high level of multidisciplinary expertise to meet the skills currently sought by employers in academia/industry/healthcare sectors. Students will undertake 12 points of taught coursework.

#### Employment Prospects:

In research institutes, hospitals, industries within health care; scientific professional, technical professional and academia

#### Admission Requirements (Onshore):

A recognised Bachelor Degree (AQF Level 7) with a GPA of 2.5 or higher, including studies in either biochemistry or chemistry AND either mathematics or statistics. Applicants who can show equivalent knowledge through vocational training and/or experience will be considered.

#### Main Research Areas:

Phenomics, systems medicine, bioinformatics, clinical areas (aging, cardiometabolic diseases, maternal and early life), omics science

### Course Structure - 12 credit points

#### Core Units

#### Core Units - 6 credit points

BIO512 Introduction to Systems Medicine - 3 points  
MURDOCH: S2-internal

BIO513 Introduction to bioinformatics and data science - 3 points  
Not available this year

#### Specified Electives - 6 credit points

Select from the following:

BIO514 Systems Medicine in Maternal and Early Life - 3 points  
Not available this year

BIO515 Systems Medicine in Cardiometabolic Disease - 3 points  
Not available this year

BIO516 Systems Medicine in Brain Health and Neuropathology - 3 points  
Not available this year

Certificate in Systems Medicine, Graduate Diploma in Systems Medicine.

#### Systems Medicine in Brain Health and Neuropathology (BIO516)

Enrolment in Graduate Certificate in Systems Medicine or Graduate Diploma in Systems Medicine or Master of Systems Medicine (Research)

#### Systems Medicine in Cardiometabolic Disease (BIO515)

Enrolment in Graduate Certificate in Systems Medicine or Graduate Diploma in Systems Medicine or Master of Systems Medicine (Research)

#### Systems Medicine in Maternal and Early Life (BIO514)

Enrolment in Graduate Certificate in Systems Medicine or Graduate Diploma in Systems Medicine or Master of Systems Medicine (Research).

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## PREREQUISITES

#### Introduction to Systems Medicine (BIO512)

Enrolment in Master of Systems Medicine (Research), Graduate Certificate in Systems Medicine, Graduate Diploma in Systems Medicine.

#### Introduction to bioinformatics and data science (BIO513)

Enrolment in Master of Systems Medicine (Research), Graduate