

HONOURS IN BIOMATHEMATICS 2021

SU Dates

15 March – 30 April	Quarter 1
10 May – 18 June	Quarter 2
21 June – 12 July	A2 or first examination opportunity
13-24 July	A3 or second examination opportunity
10 August – 17 September	Quarter 3
27 September – 5 November	Quarter 4
8 November – 30 November	A2 or first examination opportunity
1 December – 11 December	A3 or second examination opportunity

721: Computational and Discrete Methods in Biomathematics (16 credits)

SU TW782: Applied Markov Processes

Hugo Touchette (August – November)

722: Non-linear dynamical systems in Biomathematics (16 credits)

SU Module

Convener (TBC) (August-November)

723: Advanced Topics in Biomathematics I (8 credits)

AIMS-SA: Introduction to Random Systems, Information Theory, related topics

Stéphane Ouvry (22 March to 9 April)

724: Advanced Topics in Biomathematics II (8 credits)

AIMS-SA: Biophysics at the Microscale

Daisuke Takagi (10-28 May)

725: Selected Topics in Biological Sciences (8 credits)

AIMS-SA: Algebraic Biology

Matt Macauley (31 May-18 June)

726: Selected Topics in Biomedical Sciences (8 credits)

AIMS-SA: Symmetry Analysis of Differential Equations

Khalique Masood (10-28 May)

748: Advanced Topics in Biomathematics III (16 credits)

AIMS-SA: Mathematical Modelling in Medicine and Public Health

Pulliam et al (dates TBC)

749 Advanced Topics in Biomathematics IV (8 credits)

AIMS-SA: Analytical Techniques in Mathematical Biology

Lyndsay Kerr (12-30 April)

745: Elective Module (8 credits) : at least one of the following

AIMS-SA: Fluid Dynamics

Grae Worster and Richard Katz (12-30 April)

AIMS-SA: Risk Management and Insurance Economics

Juerg Weber (UWA) (31 May-18 June)

AIMS-SA: Data Science

Bubacarr Bah, Pete Grindrod and Hans-Georg Zimmerman (1-19 March)

SU TW782: Graph Theory

Riana Roux (July-October)

747: Honours project: Biomathematics Research Project (32 credits)

SU: August – November

AIMS-SA Lecture Blocks	Module	Lecturer
1-19 March	<i>Data Science</i>	Bubacarr Bah, Pete Grindrod and Hans-Georg Zimmerman
22 March-9 April	Introduction to Random Systems, Information Theory and related topics	Stéphane Ouvry
12-30 April	Analytical Techniques in Mathematical Biology	Lyndsay Kerr
12-30 April	<i>Fluid Dynamics</i>	Grae Worster and Richard Katz
10-28 May	Biophysics at the Microscale	Daisuke Takagi
10-28 May	Symmetry Analysis of Differential Equations	Khalique Masood
31 May-18 June	Algebraic Biology	Matt Macauley
31 May – 18 June	<i>Risk Management and Insurance Economics</i>	Juerg Weber
Other courses offered (not for credit)		
22-26 February	<i>Introduction to Computing and LaTeX</i>	Jan Groenewald
1-19 March	<i>Python Programming</i>	Paul Taylor and Martha Kamkuemah
22 March-9 April	<i>Networks</i>	Phil Knight
22 March-9 April	<i>Introduction to Multiscale Models and their Analysis</i>	Jacek Banasiak
10-28 May	<i>Probability and Statistics</i>	Daniel Nickelsen
Dates TBC	MMED Wokshop	SACEMA

You may take additional courses while at AIMS-SA that will not count towards your credits – those in grey in the table or more than one of the courses in italics.

Other courses available at AIMS-SA can be seen at:

<https://aims.ac.za/wp-content/uploads/sites/6/2021/01/Courses-and-abstracts-January-2021-intake.pdf>

You are welcome to attend any of these, if your timetable permits.

Course Abstracts can be seen on the AIMS course page at:

<https://aims.ac.za/wp-content/uploads/sites/6/2021/01/Courses-and-abstracts-January-2021-intake.pdf>