

LIST OF UNDERGRADUATE SCIENCE SUBJECTS Subjects Offerings Information

Links to Helpful Resources:
 - To enrol subject(s) via the MyStudent portal: [Basic Steps to Self-enrol subjects](#)
 - To withdraw subject(s) via the MyStudent portal: [Step to Withdraw subjects](#)
 - [Course and Subject Handbook](#)
 - [StudentFirst](#) (To check your timetable)



✓ = Offered

Science subjects level 1, 2, 3, 5

	Subject Code	Subject Name	Pre-requisites & Anti-requisites Note: 1 subject has 3 credit-point value	Year 2026		Year 2027	
				TR3	TR1S	TR2	TR3
Level 1 subjects	CP1401	Problem Solving and Programming I		✓	✓	✓	✓
	CP1402	Internet Fundamentals		✓	✓	✓	✓
	CP1403	Design Thinking I		✓	✓	✓	✓
	CP1404	Programming II	CP1401	✓	✓	✓	✓
	CP1406	Web Design and Development		✓	✓	✓	✓
	CP1407	Introductory Machine Learning and Data Science		✓	✓	✓	✓
	CP1409	Operating Systems and Shell Scripting		✓	✓	✓	✓
	CP1410	Cybersecurity and Cryptography Fundamentals	CP1402 and CP1409	✓	✓	✓	✓
	BS1001	Introduction to Biological Processes		✓	✓	✓	✓
	BS1007	Introduction to Biodiversity			✓	✓	✓
	CH1020	Preparatory Chemistry	(Assumed Knowledge: Any student who has completed high school Senior Chemistry to the level of High Achievement or equivalent is not permitted to enrol)		✓		
	EV1005	Environmental Processes and Global Change		✓		✓	
	EV1008	Human Geography			✓		✓
	MA1000	Mathematical Foundations	MA1020 OR High school subjects: Mathematical Methods or Specialist Mathematics (or equivalent such as Maths B or Maths C)		✓	✓	
Level 2 subjects	MA1003	Mathematical Techniques	Pre-requisite: MA1000		✓		
	MA1020	Preparatory Mathematics		✓	✓	✓	✓
	MA1580	Foundations of Data Science		✓	✓	✓	✓
	SC1101	Science, Technology and Truth		✓	✓	✓	✓
	SC1102	Modelling Natural System	MA1020 or MA0020 or Senior Mathematics or equivalent.	✓	✓	✓	✓
	AQ2001	Introduction to Aquaculture	6 credit points of Level 1 science BS, EV, MA, MB, SC subjects.	✓		✓	
	AQ2002	Aquaculture of Tropical Species	6 credit points of Level 1 science BS, EV, MA, MB, SC subjects		✓		✓
	BS2460	Fundamentals of Ecology	6 credit points of level 1 or 2 BS or EV subjects.	✓	✓		✓
	BS2470	Evolution	BS1001		✓		✓
	CP2403	Information Processing and Visualisation	12 credit points of subjects	✓		✓	
	CP2404	Database Modelling		✓	✓		✓
	CP2405	Collective Intelligence and Entrepreneurship	24 credit points of subjects			✓	
	CP2406	Programming III	CP1404	✓	✓	✓	
	CP2408	Design Thinking II	CP1403 or Admission to Bachelor of Cybersecurity	✓	✓	✓	✓
Level 3, Level 5 subjects	CP2409	Network Forensics and Data Communications	CP1402 Anti-requisite: CP5601		✓		✓
	CP2410	Algorithms and Data Structures	6 credit points of CP subjects	✓		✓	
	CP2411	3D Modelling and Animation	6 credit points of CP subjects Anti-requisite: CP5608			✓	
	CP2412	Game Design and Technologies	6 credit points of CP subjects Anti-requisite: CP5604			✓	
	CP2414	Network Security	CP1402 OR Admission to Bachelor of Business and 3 credit points of CP subjects	✓	✓		✓
	CP2421	Machine Learning for Cybersecurity	CP1401 and MA1580			✓	
	CP2422	Cloud and Data Center Security	CP1401	✓		✓	✓
	CP2423	Cybersecurity Infrastructure and Management	CP1401 and CP1410 Anti-requisite: CP2412	✓		✓	✓
	CP2501	Cloud Computing	Anti-requisite: CP3511 and CP5501	✓	✓		✓
	EV2301	Urban Geography and Design		✓	✓		✓
	EV2502	Introduction to Geographic Information Systems	9 credit points of subjects at Level 1	✓		✓	
	MA2000	Mathematics for Scientists and Engineers	MA1003			✓	
	MA2011	Discrete Mathematics for Computing	Algebra and arithmetic to a year 10 standard	✓		✓	✓
	MA2211	Discrete Mathematics	Maths B OR MA1020 OR MA0020		✓		
Level 3, Level 5 subjects	MA2405	Advanced Statistical Modelling	MA1000 and SC2202		✓	✓	
	MA2830	Data Visualisation				✓	✓
	SC2202	Quantitative Methods in Science	SC1102 OR ADMISSION TO BBEV	✓		✓	
	AQ3002	Aquaculture: Feeds and Nutrition	6 credit points of Level 2 AQ, BC, EV, MA, MB, MI, SC science subjects including 3 credit points of level 2 aquaculture subjects.	✓		✓	
	AQ3003	Aquaculture: Propagation	AQ2001 AND 6 credit points of Level 2 science AQ, EV, MA, MB, SC subjects.	✓		✓	
	AQ3015	Sustainable Aquaculture	6 credit points of Level 2 AQ, EV, MA, MB, MI, SC science subjects including 3 credit points of level 2 aquaculture subjects.		✓		✓
	CP3402	Content Management Systems	CP1404 AND 24 CREDIT POINTS OF CP SUBJECTS Anti-requisite: CP5637		✓		✓
	CP3403	Data Mining	(CP2403 AND CP2404) OR (18 CREDIT POINTS OF UNDERGRADUATE SUBJECTS INCLUDING 6 CREDIT POINTS OF CP SUBJECTS) Anti-requisite: CP3300 CP5634	✓	✓		✓
	CP3404	Information Security	CP2414 OR CC3501 OR (18 CREDIT POINTS OF SUBJECTS INCLUDING CP1402) Anti-requisite: CP3302 CP5603	✓	✓		✓
	CP3405	Design Thinking III	CP2408	✓	✓	✓	✓
	CP3406	Mobile Computing	CP1404 AND 18 CREDIT POINTS OF CP SUBJECTS Anti-requisite: CP3307 CP5307	✓		✓	✓
	CP3407	Advanced Software Engineering	CP1404 AND 18 CREDIT POINTS OF CP SUBJECTS Anti-requisite: CP2013 CP3110 CP5507		✓	✓	
	CP3413	Information Processing and Visualisation	MINIMUM OF 12 CREDIT POINTS OF BU AND/OR BX SUBJECTS Anti-requisite: CP2403 Note: For BBUS students only	✓		✓	✓
	CP3414	Ethical Hacking	CP2422 and CP2423 Anti-requisite: CP5614	✓	✓	✓	✓
	CP3416	Behavioral Cybersecurity	36 CREDIT POINTS OF CP OR MA SUBJECTS WITHIN THE DEGREE	✓	✓		✓
	CP3417	Cybersecurity for Operational Technology	CP2423		✓		✓
	CP3418	Best Practices in Cybersecurity	CP3414	✓		✓	✓
	CP3501	Deep Learning	Anti-requisite: CP5701		✓	✓	
	CP3511	Cloud Computing	Anti-requisite: CP2501 and CP5501 Note: For BBUS students only	✓	✓		✓
	EV3110	Environmental and Social Impact Assessment	At least 9 CP of subjects at Level 2	✓		✓	
	EV3404	Field Studies in Tropical Geography	At least 9 CP of subjects at Level 2			✓	
	MA3405	Statistical Data Mining for Big Data	MA2405 OR MA2000 OR SC2202	✓		✓	✓
	MA3831	Natural Language Processing, Web Scraping and Large Data Processing	CP1404 & MA3405	✓	✓		✓
	MA3832	Neural Network and Deep Learning	CP1404 & MA3405	✓	✓		✓
	MB3200	Marine Conservation Biology	BS2460 OR SC2202	✓	✓		✓
	MB5001	Tropical Marine Ecology and Coastal Impacts	Approval by Subject Coordinator required	✓			✓
	SC5901	Special Topic 1	Approval by Subject Coordinator required Note: For BSc & BBEV students only	✓	✓	✓	✓
	SC5902	Special Topic 2	Approval by Subject Coordinator required Note: For BSc & BBEV students only	✓	✓	✓	✓

Disclaimer: The above information is correct as below date. Due to unforeseen situation/s, there might be change/s done in subject offerings before each trimester. Your understanding is greatly appreciated.

Updated on 30 September 2026