

Programme Name	Bachelor of Science (Mathematics & Computing Science)
Programme Description	<p>This Programme aims to develop student's knowledge and skills in specific areas of Mathematics and Computer Science to meet the demands of academia, industries, private and government sectors. Students can also choose one of the following subjects such as Information Systems, Physics, Chemistry, Biology, and Education with or Mathematics or Computer Science for studying double major.</p> <p>This program will help students to:</p> <p>A. Demonstrate the understanding of the fundamentals of Mathematics and Computer science.</p> <p>B. Enable them to solve problems intelligently.</p> <p>C. Meet the needs of ICT of Fiji and the region.</p> <p>D. Enable to establish the IT industry in Fiji.</p>
Majors	Mathematics and Computer Science
Minimum Requirements	Pass in Year 13 with 200 out of 400 marks with 50% minimum marks in English, Mathematics and any two subjects OR Foundation Science with GPA of 2.00 or more.
Duration	6 Semesters + 3 Months Industrial Attachment (anytime during Year 3)
Programme Type	Bachelor's Degree
College Name	College of Engineering, Science & Technology
Campus	Nasinu ,Lautoka
Credit Points	360

Programme Structure		
Course Code	Course Title	Credit Points
	Year 1 Semester 1	
MTH515Sem	Single Variable Calculus	15
CSC511Sem	Introduction to C++	15
LNG501Sem	English for Academic Purpose	15
ETH501Sem	Intermediate Ethics and Governance	15
	Year 1 Semester 2	
MTH514Sem	Probability and Statistics	15
MTH516Sem	Solid Geometry and Multivariable Calculus	15
CSC512Sem	Object Oriented Programming	15
MTH511Sem	Discrete Mathematics	15
	Year 2 Semester 1	

MTH611Sem	Real Analysis	15
MTH612Sem	Abstract Algebra	15
CSC621Sem	Data Structures and Algorithm	15
CSC633Sem	Operating Systems	15
	Year 2 Semester 2	
MTH610Sem	Ordinary and Partial Differential Equations	15
MTH613Sem	Linear Algebra	15
CSC622Sem	Artificial Intelligence	15
CSC635Sem	Mobile Computing	15
	Year 3 Semester 1	
MTH710Sem	Complex Analysis	15
MTH711Sem	Numerical Analysis	15
CSC720Sem	Design and Analysis of Algorithms	15
CSC722Sem	Data Communications and Networking	15
	Year 3 Semester 2	
MTH712Sem	Linear Programming	15
MTH715Sem	Integral Transforms	15
MTH714Sem	Number Theory	15
CSC705Sem	Distributed Computing	15
CSC726Sem	Cyber Security	15
	Total Credit Points	360

Course Prerequisite		
Course Code	Course Title	Prerequisite
MTH515Sem	Single Variable Calculus	Year 13 or Foundation Mathematics Pass
CSC511Sem	Introduction to C++	* The student must have passed Year 13 or Equivalent
LNG501Sem	English for Academic Purpose	
ETH501Sem	Ethics Value and Governance	
	Year 1 Semester 2	
MTH514Sem	Probability and Statistics	Year 13 or Foundation Mathematics Pass
MTH516Sem	Solid Geometry and Multivariable Calculus	Year 13 or Foundation Mathematics Pass
CSC512Sem	Object Oriented Programming	* The student must have passed CSC511 or equivalent.
MTH511Sem	Discrete Mathematics	Year 13 or Foundation Mathematics Pass
	Year 2 Semester 1	
MTH611Sem	Real Analysis	Pass in MTH515Sem or MTH516Sem
MTH612Sem	Abstract Algebra	Pass in MTH511Sem
CSC621Sem	Data Structures and Algorithm	* Pass in CSC511 and CSC512
CSC633Sem	Operating Systems	* Student must have passed CSC511
	Year 2 Semester 2	
MTH610Sem	Ordinary and Partial Differential Equations	Pass in MTH515Sem or MTH516Sem

MTH613Sem	Linear Algebra	Pass in MTH515Sem or MTH516Sem
CSC622Sem	Artificial Intelligence	* Student must have passed CSC511
CSC635Sem	Mobile Computing	* CSC511
	Year 3 Semester 1	
MTH710Sem	Complex Analysis	Pass in MTH611
MTH711Sem	Numerical Analysis	Pass in MTH611 or MTH613
CSC720Sem	Design and Analysis of Algorithms	* Student must have passed in CSC621
CSC722Sem	Data Communications and Networking	* The student must have passed CSC626
	Year 3 Semester 2	
MTH712Sem	Linear Programming	Pass in any 600 level Mathematics unit
MTH715Sem	Integral Transforms	Pass in MTH610
CSC705Sem	Distributed Computing	* Student must have passed CSC621
CSC726Sem	Cyber Security	* Student must have passed CSC626