**Maths Department Courses**

**Mathematics Level 1** ***MA101***  
This course covers the following topics: Algebra, Number, Measurement, Geometry and Statistics at Level 6 in the National Mathematics Curriculum.  The course should be chosen by students who feel that they will want and be capable of Mathematics at Level 2 and beyond.

**Mathematics Alternative Level 1 MA102**  
This course is to provide an alternative pathway for students who wish to gain the required Numeracy credits for NCEA Level 1. These approximately align with Level 4 of the National Curriculum. It is not likely that Achievement Standards will be tackled. The course is appropriate for students who do not wish to continue their Maths to Level 2 and beyond. Placement in this class is by HOD Mathematics approval only and numbers will be limited.

**Mathematics Level 2**  ***MA201***  
This course is a study of mathematical functions and their use in problem solving. About two-thirds of the course topics are in common with Level 1 Achievement Standards and extend the treatment of these topics. Calculus will be introduced as a new topic. Students who know that they want to take Maths at L3 should take this course. Success inNCEA Level 1 and HOD approval.  Achievement of standard 91027 or 91028, at Level 1, will be a prerequisite for enrolment on this course

**Mathematics Alternative Level 2  MA201**  
This course will progress at a slower pace and focus on less credits than MA201. The course will cover some standards in common with MA201 but will also address standards of a more practical nature, such as networks and the writing of questionnaires. Students who wish to take Maths at L3 should not choose this course. Students must have passed at least oneexternally assessed Maths Achievement Standard at L1 in order to be accepted onto this course.

**Calculus Level 3 MC301**                             
The content of the course includes further detailed study of topics such as algebra, trigonometry, geometry and differentiation, with one emphasis being on their application in the “real world”.  
A willingness to study outside the classroom, along with a genuine interest in the subject and a high level of motivation are essential to the successful completion of this course.  The course would be of interest to those students wishing to study medicine, engineering or sciences at University. Achievement of externally assessed Achievement Standards Algebra, 91261 and/or Calculus, 91262 at L2 shall be a requirement for course enrolment.

**Statistics Level 3** ***MS301***  
The content of this course includes further study of statistical topics such as time series, probability, linear programming, equation solving, various probability distribution models, confidence intervals and a statistical investigation involving bi-variate data. There is a considerable algebra content to this course.  
A willingness to study outside the classroom is needed to successfully complete this course. The course would be of interest to students wishing to study medicine, sciences, and a wide variety of humanities or engineering at University. Achievement of externally assessed Achievement Standards Algebra at L2 shall be a requirement for course enrolment.