

Course Engineering Studies		NESA Course Code: Preliminary 11120 HSC 15120	
2 units for each of Preliminary and HSC Year. Board Developed Course. DOES count in the 6 units of the Board Developed Courses required for the HSC. DOES count towards an ATAR. Exclusions: Nil		Course costs YES	
Success Criteria (what skills and aptitudes you need to have for success in this subject) Advanced minimum, (extension preferred) Physics and/or Chemistry desirable			
Course Description The aim of Engineering Studies Stage 6 is to develop students' understanding and appreciation of the nature and significance of engineering and its impact on society with an emphasis on the application of engineering methodology. Engineering Studies Stage 6 comprises a Preliminary course made up of 4 compulsory modules and an HSC course made up of 4 compulsory modules. Within each module students develop knowledge and skills in the areas of: Engineering Mechanics and Hydraulics Engineering Materials Communication Engineering Electronics Historical and Societal Impacts of Engineering			
Main Topics Covered			
Preliminary Course		HSC Course	
Students undertake the study of 4 compulsory modules in the areas of: Engineering Fundamentals Engineering Products Braking Systems Biomedical engineering		Students undertake the study of 4 compulsory modules in the areas of: Civil Structures Personal and Public Transport Aeronautical Engineering Telecommunications Engineering	
Particular Course Requirements: Engineering reports are an integral part of both the Preliminary and HSC courses and students will develop an engineering report for each module.			
Assessment for the HSC course			
External Assessment	Weighting	Internal Assessment	Weighting
A three hour written examination <u>Section I</u> Multiple Choice Application Modules <u>Section II</u> – Short Structured Responses All Modules Historical and Societal Influence Scope of the Profession, application and focus modules Engineering Reports	20 80	Scope of Engineering Engineering Principles Communication Skills Impact of Engineering Management and Problem Solving Skills Engineering Methodology	20 40 10 10 10 10
	100%		100%