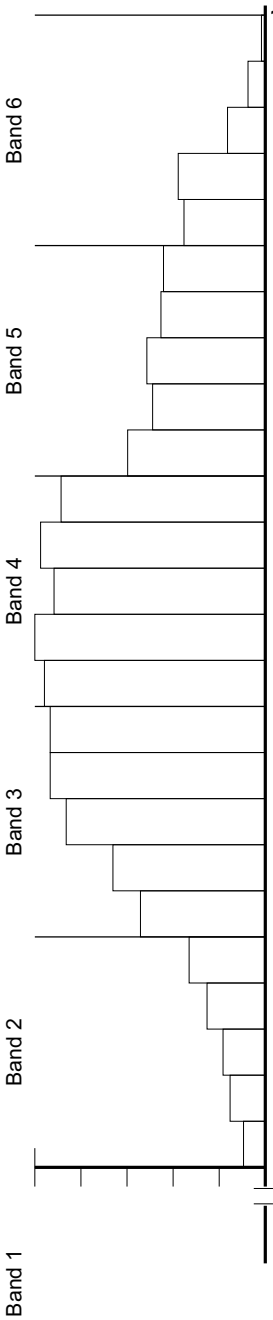
2025 Course Report

Engineering Studies

State Distribution | **The typical performance in this band:**



100–90 Demonstrates extensive knowledge of the content, methodology, influences and responsibilities in engineering practices. Constructs and evaluates engineering reports in order to recommend and predict solutions. Chooses, performs and evaluates graphical and analytical solutions. Demonstrates an expertise in the analysis and solution of mechanics problems. Demonstrates a comprehensive understanding of the structure and property relationship between materials and manufacturing processes by interpreting test results and explaining design limitations. Identifies materials and processes used in the past. Is critically aware of the social, cultural and historical issues in engineering. Demonstrates sophisticated written, graphical and mathematical communication skills, using appropriate engineering terminology, methods and conventions.

90–80 Demonstrates thorough knowledge of the content, methodology, influences and responsibilities in engineering practices. Assembles and organises information for engineering reports and makes recommendations and predictions based upon engineering reports. Chooses appropriate methods of graphical and analytical problem solving. Solves problems involving statics and dynamics by selecting and manipulating appropriate data into relevant formulae. Has a good understanding of manufacturing processes and the structure and property relationship between materials. Recognises the social, cultural and historical implications of technological change in engineering. Demonstrates highly developed written, graphical and mathematical communication skills, using appropriate engineering terminology, methods and conventions.

80–70 Demonstrates sound knowledge of the content, methodology, influences and responsibilities in engineering practices. Prepares and interprets engineering reports and makes some recommendations. Selects from both graphical and analytical solutions to solve problems. Has a working knowledge of the principles of engineering mechanics and can carry out relevant calculations to solve problems involving statics and dynamics. Links material structures with properties and therefore identifies appropriate manufacturing processes for a range of applications. Traces the development of selected components in engineering and their impact on society. Demonstrates sound written, graphical and mathematical communication skills, using appropriate engineering terminology, methods and conventions.

70–60 Demonstrates basic knowledge of the content, methodology, influences and responsibilities in engineering practices. Prepares and uses engineering reports. Processes data in problem-solving activities in engineering mechanics, such as by using forces, free body diagrams and vector geometry. Has a foundational understanding of manufacturing processes and the classification of materials. Demonstrates an awareness of the development and operation of engineered products and of the contribution of engineering to society. Demonstrates basic written, graphical and mathematical communication skills, using engineering terminology, methods and conventions.

60–50 Demonstrates elementary knowledge of the content, methodology, influences and responsibilities in engineering practices. Recognises the importance of engineering reports. Substitutes data into formulae while attempting to solve engineering mechanics problems. Interprets data from graphs, recalls basic definitions and identifies steps in manufacturing processes. Recognises that engineering processes impact upon people. Demonstrates elementary written, graphical and mathematical communication skills, using simple engineering terminology and conventions.

50–0 Performance reported as Band 1 indicates that the minimum standard expected was not demonstrated.

The candidature of this course was 2,558.