### **MANUAL ARTS**

Students fascinated with the interplay of tools, materials and machines will love Narangba's Manual Arts Block.

Our construction and manufacturing facilities consist of several wood and metal workshops. Students fascinated with the interplay of tools, materials and machines will the love





# **Our Mission**

To develop inspired, innovative and resilient learners prepared to challenge the future.

# **Manual Arts**

Junior Program 9-10





#### INDUSTRIAL TECHNOLOGY MANUFACTURING - ITM

This course would suit those students who have an interest in manufacturing processes and manipulation of materials. Year 10 Industrial Technology Manufacturing is the foundation for students studying Furnishing Skills and Engineering Skills in Years 11 and 12.

Students gain knowledge and practice of safe work habits in the workshop environment. They make a variety of practical projects out of wood, metals, and plastics. This course focuses on the nature of materials, their design characteristics and ways we can use them for our own purposes.



Assessment takes the form of practical projects, related theory components and end term tests

## INDUSTRIAL TECHNOLOGY STUDIES - ITN

Prerequisite: Must have high passes (Min B) in Math, Science, English in Year 8.

The Industrial Technology Studies program emphasises theory and report writing within the Engineering field. It investigates Engineering Principles and Mechanics, Material Science, System Analysis and Product Design.

Students apply the design process to problem solve and formulate design solutions, make proto-type models using the design process, 3D CAD Modelling, 3D printing and Laser cutting. Reports are written that articulate their design intentions. This course focuses on problem solving, testing, development and evaluation.



Assessment takes the form of written assignments, related theory components, 3D CAD design and an end of term test. Due to the Academic rigor of this subject at least 1 Hour per week of homework is expected.



Students must also have a Curriculum Activity Risk Assessment (CARA) form signed by their Parent/Carer to participate in this subject.