# 6 Course Structure

Industrial Technology Stage 6 has a Preliminary course and an HSC course.

The Preliminary course of 120 indicative hours consists of project work and an industry study that provide a broad range of skills and knowledge related to the focus area chosen and an introduction to processes, skills and practices relevant to the design, management, communication and construction of practical projects.

The HSC course of 120 indicative hours consists of the development, management and communication of a major practical project and folio that contribute to the development of knowledge, skills and understanding related to the focus area of study.

Students choose to study ONE of SIX focus areas. The same area is to be studied in both the Preliminary and HSC courses. The focus areas are:

1. Automotive Technologies
2. Electronics Technologies
3. Graphics Technologies
4. Metal and Engineering Technologies
5. Multimedia Technologies
6. Timber Products and Furniture Technologies.

Both the Preliminary and HSC courses are organised around four sections:

1. Industry Study
2. Design, Management and Communication

C. Production

1. Industry Related Manufacturing Technology.

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| **Preliminary Course**  **120 indicative hours** |  | **HSC Course**  **120 indicative hours** | |
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| **Industry Study 15%**  Study of the organisation and management of an individual business within the focus area, including:   * structural * technical * environmental * sociological * personnel * OHS issues |  | **Industry Study 15%**  Study of the organisation and management of the industry related to the focus area, including:   * structural * technical * environmental * sociological * personnel   sectors within the industry  legislation   * OHS issues   career opportunities  historical aspects  sales and marketing | |
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| **Design 10%**  Design and plan projects through the completion of associated folios  elements and principles of design  types of design  quality  influences affecting design |  | **Major Project 60%**  **Design, Management and Communication**  application of design principles in the production of the Major Project:  design development  sketching and idea generation  prototyping, modelling and testing  production and working drawings  quality and ongoing evaluation  selection of appropriate materials, processes and other resources   * application of management and communication skills to produce a related folio justifying:   research   * design * analysis * evaluation including selection of appropriate materials, components, processes and technologies   ICT  OHS  presentation Productionapplying knowledge and skills through the construction of a Major Project which reflects:  * quality * evidence of a range of skills * degree of difficulty * links between planning and production * use of appropriate materials, components, processes and technologies * evidence of practical problem solving * OHS and safe work practices | |
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| **Management and Communication 20%**  Manage work through the completion of a management folio linked to each project produced   * development of a number of practical projects * development of management folios * development of skills related to research, analysis and evaluation * skills in managing projects * documentation skills in the preparation, planning and presentation of a management folio * skills in literacy through written reports, folio work * skills in computer-based technologies * numeracy skills related to sizing, costing, estimating, ordering and efficient resource usage * graphical skills related to the project work * knowledge and understanding of workplace safety and communication:   signage  OHS principles and requirements  personal protective equipment (PPE)  safe working practices  risk assessment |  |
| **Preliminary Course**  **120 indicative hours (continued)** |  | **HSC Course**  **120 indicative hours (continued)** | |
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| Production 40%  * developing knowledge and skills through the construction of a number of projects * acquisition of relevant practical skills |  | **Industry Related Manufacturing Technology 25%**   * demonstrates knowledge and understanding of a range of materials, processes, tools, equipment, machinery and technologies related to the focus area industry through practical experiences, including the development of the Major Project * new/emerging technologies associated with the industry | |
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| **Industry Related Manufacturing Technology 15%**   * developing knowledge and understanding of a range of materials, processes, tools, equipment and machinery through the construction of a number of projects |  |