Industrial Technology: Timber

Cabinetwork: Core module #3

Industrial Technology: Timber aims to provide students in Year 10 with practical and theoretical experiences in the study of industry, materials, processes, technology, the effects it has on our society and how this can be applied in the classroom.

	Year 10: **Semester #1**	**Year: 2006** **Class: Cabinetwork #3**	**Week**	**Course (100–150 hrs)** **Notes**
	Outcomes	**What students learn about** **Term 1**		**Why have these units been developed?** **What happens in the units of work?**
OH&S	Refer to outcomes 5.1.1, 5.1.2, 5.4.2	• Safe use and handling of chemicals. • Potential hazards in the workshop. • The intent of the OH&S Act and the role of WorkCover in the workplace. • Safety test.	**1**	• This unit is specific to the Industrial Technology: Timber syllabus. Each semester of work is equivalent to 50 hours of classroom experience. • Each core module has been developed to allow students to work sequentially to develop greater knowledge. • Students are required to produce an occasional table and a report using appropriate software and hardware for this project. • The unit starts with the unit OH&S and risk management. • Design is the first focus through the use of design principles and processes, workplace communication (industrial terminology, design, materials, sketches, workshop drawings and material list). • Students will then be introduced in the workshop to a series of basic hand tool exercises, workshop drawing interpretations, marking out and portable power tools and machines including the biscuit jointer, bandsaw and drills. • Techniques and processes are gradually introduced to continue the development of the project including dowel joint and biscuit joint. • Finally the students are introduced to finishing techniques and skills to enhance the appearance and/or function of practical projects. **What benefits are there for the students?** This unit will: • encourage students to learn through progressive and sequential modules to expand their knowledge and understanding of the timber industry • promote high levels of intellectual quality • provide a quality learning environment • generate significance by connecting students with the intellectual demands of their work. • provide students with the opportunity to investigate and apply problem solving. • encourage a sense of purpose, enjoyment, and personal satisfaction through the production of practical projects. • develop self sufficiency, resourcefulness, mature judgment and the capacity to work cooperatively and responsibly.
Occasional table	Refer to outcomes 5.2.1, 5.5.1, 5.6.1	• Design principles and processes. • Project sequencing and time management.	**2**	
	Refer to outcomes 5.2.1, 5.5.1, 5.6.1	• Sketches. • Material list. • Working drawings. • Project costing.	**3**	
	Refer to outcomes 5.4.1, 5.5.1	• Industry terminology. • Report writing. • Procedure diary – factual recount.	**4**	
	Refer to outcomes 5.2.2, 5.4.2, 5.5.1	• A variety of power and machine tools including: – biscuit jointer.	**5**	
	Refer to outcomes 5.2.2, 5.4.2, 5.5.1	• A variety of power and machine tools including: – sanders – bandsaw – drills.	**6**	
	Refer to outcomes 5.2.2, 5.4.2, 5.5.1	• A range of framing, corner and widening joints including: – dowel joint – biscuit joint.	**7**	
Project Report	Refer to outcomes 5.4.1, 5.5.1	**Project report review** • Working drawings. • Research techniques: Internet • Project costing. • Procedure diary – factual recount.	**8**	
	Refer to outcomes 5.2.2, 5.4.2, 5.5.1	• A variety of power and machine tools including: – router.	**9**	
	Refer to outcomes 5.4.1, 5.5.1	• Procedure diary – factual recount. • Report writing – evaluation.	**10**	

Industrial Technology: Timber

Cabinetwork: Core module #3

Industrial Technology: Timber aims to provide students in Year 10 with practical and theoretical experiences in the study of industry, materials, processes, technology, the effects it has on our society and how this can be applied in the classroom.

	Year 10: **Semester 1**	**Year: 2006** **Class: Cabinetwork #3**	**Week**	**Course (100–150 hrs)** **Notes**
	Outcomes	**What students learn about** **Term 2**		**Why have these units been developed?** **What happens in the units of work?**
OH&S	Refer to outcomes 5.1.1, 5.1.2, 5.4.2	• Safe use and handling of chemicals. • Potential hazards in the workshop. • The intent of the OH&S Act and the role of WorkCover in the workplace.	**1**	• This unit is specific to the Industrial Technology: Timber syllabus. Each semester of work is equivalent to 50 hours of classroom experience. • Each core module has been developed to allow students to work sequentially to develop greater knowledge. • Students are required to produce an occasional table and a report using appropriate software and hardware for this project. • The unit starts with the unit OH&S and risk management. • Design is the first focus through the use of design principles and processes, workplace communication (industrial terminology, design, materials, sketches, workshop drawings and material list). • Students will then be introduced in the workshop to a series of basic hand tool exercises, workshop drawing interpretations, marking out and portable power tools and machines including the biscuit jointer, bandsaw and drills. • Techniques and processes are gradually introduced to continue the development of the project including dowel joint and biscuit joint. • Finally the students are introduced to finishing techniques and skills to enhance the appearance and/or function of practical projects. **What benefits are there for the students?** This unit will: • encourage students to learn through progressive and sequential modules to expand their knowledge and understanding of the timber industry • promote high levels of intellectual quality • provide a quality learning environment • generate significance by connecting students with the intellectual demands of their work. • provide students with the opportunity to investigate and apply problem solving. • encourage a sense of purpose, enjoyment, and personal satisfaction through the production of practical projects. • develop self sufficiency, resourcefulness, mature judgment and the capacity to work cooperatively and responsibly.
Occasional table	Refer to outcomes 5.4.1, 5.5.1	• The effects of the timber industry on society and the environment.	**2**	
	Refer to outcomes 5.2.2, 5.4.2, 5.5.1	• A range of processes and techniques used in cabinet making.	**3**	
	Refer to outcomes 5.3.1, 5.3.2, 5.4.2	• The properties and applications of solid timbers, manufactured boards and veneers.	**4**	
	Refer to outcomes 5.5.1, 5.7.2	• Half yearly exam. • Industrial manufacturing techniques in cabinetwork including the application of computer aided manufacture (CAM).	**5**	
Project Report	Refer to outcomes 5.4.1, 5.5.1	**Project report review** • Working drawings. • Research techniques: Internet. • Project costing. • Procedure diary – factual recount.	**6**	
Occasional table	Refer to outcomes 5.3.1, 5.3.2, 5.4.2	• Hardware and allied materials used in cabinetwork such as: – hinges – handles – draw runners.	**7**	
	Additional content	• Methods of producing veneers. • Elementary CAD applications.	**8**	
	Additional content	• A range of techniques and skills to enhance the appearance and/or function of practical projects.	**9**	
	Refer to outcomes 5.4.1, 5.5.1	• Report writing including: – Workshop drawings. – Computer software applications. – Procedure diary – factual recount. • Report writing – evaluation.	**10**	

Industrial Technology: Timber

Cabinetwork: Core module #4

Industrial Technology: Timber aims to provide students in Year 10 with practical and theoretical experiences in the study of industry, materials, processes, technology, the effects it has on our society and how this can be applied in the classroom.

	Year 10: Semester 2	**Year: 2006 Class: Cabinetwork #4**	**Week**	**Course (150–200 hrs) Notes**
	Outcomes	**What students learn about Term 3**		**Why have these units been developed? What happens in the units of work?**
OH&S	Refer to outcomes 5.1.1, 5.1.2, 5.4.2	• Risk management principles included in the OH&S Act and regulation. • Risk identification and hazard reduction strategies.	**1**	• This unit is specific to the Industrial Technology: Timber syllabus. Each semester of work is equivalent to 50 hours of classroom experience. • Each core module has been developed to allow students to work sequentially to develop greater knowledge. • Students are required to produce a project of their choice and a report using appropriate software and hardware for this project. • The unit starts with the unit OH&S and risk management. • Design is the first focus through the use of design principles and processes, workplace communication (industrial terminology, design, materials, sketches, workshop drawings and material list). • Students will then be introduced in the workshop to a series of basic hand tool exercises, workshop drawing interpretations, marking out and portable power tools and machines including the biscuit jointer, bandsaw and drills. • Techniques and processes are gradually introduced to continue the development of the project including dowel joint and biscuit joint. • Finally the students are introduced to finishing techniques and skills to enhance the appearance and/or function of practical projects. **What benefits are there for the students?** This unit will: • encourage students to learn through progressive and sequential modules to expand their knowledge and understanding of the timber industry • promote high levels of intellectual quality • provide a quality learning environment • generate significance by connecting students with the intellectual demands of their work. • provide students with the opportunity to investigate and apply problem solving. • encourage a sense of purpose, enjoyment, and personal satisfaction through the production of practical projects. • develop self sufficiency, resourcefulness, mature judgment and the capacity to work cooperatively and responsibly.
Own project	Refer to outcomes 5.4.1, 5.5.1 Refer to outcomes 5.2.1, 5.5.1, 5.6.1	• Industry terminology. • The application of design principles and processes to individual projects.	**2**	
	Refer to outcomes 5.2.1, 5.5.1, 5.6.1	• Project management. • Procedure report diary – factual recount.	**3**	
	Refer to outcomes 5.4.1, 5.5.1	• Workshop drawings. • Material list. • Project costing. • A range of computer software applications to assist in the planning, production and reporting of practical projects.	**4**	
	Refer to outcomes 5.2.1, 5.5.1, 5.6	• Resource selection.	**5**	
	Refer to outcomes 5.2.2, 5.4.2, 5.5.1	• A range of equipment, tools and machines in the timber focus area.	**6**	
Project Report	Refer to outcomes 5.4.1, 5.5.1	**Project report review** • Report writing. • Workshop drawings. • Computer software applications. • Procedure diary – factual recount.	**7**	
Own project	Refer to outcomes 5.2.2, 5.4.2, 5.5.1	• The use of jigs in the manufacture of cabinetwork projects.	**8**	
	Refer to outcomes 5.2.2, 5.4.2, 5.5.1	• A range of processes and construction techniques including: – knockdown fittings.	**9**	
	Refer to outcomes 5.5.1, 5.7.2	• Industrial manufacturing techniques in the cabinet making industry.	**10**	

Industrial Technology: Timber

Cabinetwork: Core module #4

Industrial Technology: Timber aims to provide students in Year 10 with practical and theoretical experiences in the study of industry, materials, processes, technology, the effects it has on our society and how this can be applied in the classroom.

	Year 10: **Semester 2**	**Year: 2005** **Class: Cabinetwork #4**	**Week**	**Course (150–200 hours)** **Notes**
	Outcomes	**What students learn about** **Term 4**		**Why have these units been developed?** **What happens in the units of work?**
Own project	Refer to outcomes 5.2.2, 5.4.2, 5.5.1	• A range of processes and construction techniques including: – flat pack construction.	**1**	• This unit is specific to the Industrial Technology: Timber syllabus. Each semester of work is equivalent to 50 hours of classroom experience. • Each core module has been developed to allow students to work sequentially to develop greater knowledge. • Students are required to produce a project of their choice and a report using appropriate software and hardware for this project. • The unit starts with the unit OH&S and risk management. • Design is the first focus through the use of design principles and processes, workplace communication (industrial terminology, design, materials, sketches, workshop drawings and material list). • Students will then be introduced in the workshop to a series of basic hand tool exercises, workshop drawing interpretations, marking out and portable power tools and machines including the biscuit jointer, bandsaw and drills. • Techniques and processes are gradually introduced to continue the development of the project including dowel joint and biscuit joint. • Finally the students are introduced to finishing techniques and skills to enhance the appearance and/or function of practical projects. **What benefits are there for the students?** This unit will: • encourage students to learn through progressive and sequential modules to expand their knowledge and understanding of the timber industry • promote high levels of intellectual quality • provide a quality learning environment • generate significance by connecting students with the intellectual demands of their work. • provide students with the opportunity to investigate and apply problem solving. • encourage a sense of purpose, enjoyment, and personal satisfaction through the production of practical projects. • develop self sufficiency, resourcefulness, mature judgment and the capacity to work cooperatively and responsibly.
	Refer to outcomes 5.3.1, 5.3.2, 5.4.2	• Hardware and cabinet fittings.	**2**	
	Refer to outcomes 5.3.1, 5.3.2, 5.4.2	• The properties and application of materials associated with the timber focus area.	**3**	
	Refer to outcomes 5.7.1, 5.7.2	• The effects of the timber industry on society and the environment.	**4**	
	Refer to outcomes 5.3.1, 5.3.2, 5.4.2	• Timber defects. • Yearly exam.	**5**	
Project Report	Refer to outcomes 5.4.1, 5.5.1	**Project report review** • Report writing. • Orthogonal drawing. • Computer software applications. • Procedure diary – factual recount.	**6**	
Own project	Refer to outcomes 5.2.2, 5.4.2, 5.5.1	• Identify a range of timber finishes and their applications, including clear finishes, stains and paints.	**7**	
	Additional content	• Elementary CAD applications. • Defects in timber due to insect and or fungal attack.	**8**	
	Additional content	• A range of techniques and skills to enhance the appearance and/or function of practical projects.	**9**	
	Refer to outcomes 5.4.1, 5.5.1	• Report writing including: – workshop drawings – computer software applications – procedure diary – factual recount – report writing – evaluation.	**10**	