

Vocational education



CS Industry curriculum frameworks

Distribution by the Board of Studies

How will the syllabuses be distributed to schools?

By this time, schools will have received Part A of each industry curriculum framework. Part A includes the following information:

- Course structures
- Assessment requirements and advice
- Work placement requirements
- HSC requirements and certification.

Part A does not have any of the units of competency contained in the frameworks. This information is in Part B.

Part B will be on the Board's web site from 23 July 1999. Schools will be able to obtain a hard copy

version of Part B by completing the form distributed by the Board of Studies.

It must be noted that the industry curriculum frameworks can be delivered only by schools that meet specific quality assurance requirements. These requirements relate to teachers' qualifications and physical resources.

Information outlining these requirements will be published in the new version of the Dual Accredited Vocational Course Information Package entitled **Industry Curriculum Framework Information Package**. This package will be distributed to all schools in Term 3.

Patterns of study and the industry curriculum frameworks

VET courses are not divided into prescribed Preliminary and HSC patterns of study. Schools can determine which units count towards the HSC and which towards the Preliminary years. The following tables give an indication of the way that the frameworks can be divided into Preliminary and HSC patterns of study over a two-year period.

Information technology

Course	Hours	Units across two years
Information Technology	120	<ul style="list-style-type: none"> • 2 units x 1 year or • 1 unit x 2 years
Information Technology	180	<ul style="list-style-type: none"> • 2 units x 1 year + 1 unit x 1 year • 3 units x 1 year
Information Technology	240	<ul style="list-style-type: none"> • 2 units x 2 years • 3 units x 1 year + 1 unit x 1 year • 4 units x 1 year
Information Technology Support (240 hours) + IT Specialisation Studies (60 hours)	300 (240 + 60)	<ul style="list-style-type: none"> • 3 units x 1 year + 2 units x 1 year • 4 units x 1 year + 1 unit x 1 year • 5 units x 1 year
Information Technology Support (240 hours) + Specialisation Studies (120 hours)	360 (240 + 120)	<ul style="list-style-type: none"> • 3 units x 2 years • 2 units x 1 year + 4 units x 1 year • 5 units x 1 year + 1 unit x 1 year
Information Technology Specialisation Studies *	120	<ul style="list-style-type: none"> • 2 units x 1 year • 1 unit x 2 years



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Information Technology Specialisation Studies (120 hours)* + Information Technology Specialisation Studies (60 hours)*	180 (120 + 60)	<ul style="list-style-type: none"> • 2 units x 1 year + 1 unit x 1 year • 3 units x 1 year
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* Special entry conditions apply.

Hospitality

Course	Hours	Units across two years
Hospitality (Operations)	120	<ul style="list-style-type: none"> • 2 units x 1 year • 1 unit x 2 years
Hospitality (Kitchen Operations)	120	<ul style="list-style-type: none"> • 2 units x 1 year • 1 unit x 2 years
Hospitality (Operations)	240	<ul style="list-style-type: none"> • 2 units x 2 years • 3 units x 1 year + 1 unit x 1 year • 4 units x 1 year
Hospitality (Operations) <i>Either</i> Commercial Cookery <i>or</i> Accommodation Services <i>or</i> Cross Functional Operations <i>or</i> Food and Beverage Kitchen Operations	300 (240 + 60)	<ul style="list-style-type: none"> • 2 units x 2 years + 1 unit x 1 year • 3 units x 1 year + 2 units x 1 year • 4 units x 1 year + 1 unit x 1 year • 5 units x 1 year

Industry curriculum frameworks and the Universities Admission Index

Students will be able to use achievement in industry curriculum frameworks to contribute to the calculation of the Universities Admission Index (UAI).

The UAI is calculated by the University of Sydney on behalf of universities in NSW and the ACT. A candidate's UAI is calculated from the scaled aggregate of the marks in the best ten units in Board developed HSC courses.

The Committee of Chairs of Academic Boards/Senates of Universities in NSW and the ACT has recently

finalised decisions regarding the categorisation of new HSC Board developed courses for the 2001 UAI.

All Board developed courses are classified by the universities as Category A or Category B. The criteria for Category A courses are:

- academic rigour
- depth of knowledge and understanding
- degree to which the course contributes to assumed knowledge for tertiary studies.

For a full listing of the new Category A courses, schools should see UAC's web site www.uac.edu.au.

Only the best two units from Category B courses are available for inclusion in the calculation of the UAI.

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Category B courses

- Business Services (Administration) (240 hours)
- Construction (240 hours)
- Information Technology Support (240 hours)
- Metal and Engineering (240 hours)
- Primary Industries (240 hours)
- Retail Operations (240 hours)
- Hospitality Operations (240 hours)
- Tourism (240 hours)
- Industrial Technology*
- Accounting**
- Electronics Technology**

* Industrial Technology is not a vocational course.

** Accounting and Electronics Technology are Board developed courses delivered by TAFE.

A student's pattern of study for the HSC is subject to the following restrictions:

1. Commencing in Year 11, 2000, candidates for the Higher School Certificate (HSC) must undertake a program of study comprising at least:
 - 12 units of Preliminary courses; and
 - 10 units of HSC courses.
2. Both the Preliminary course pattern and the HSC course pattern must include at least:
 - six units of Board developed courses
 - two units of a Board developed course in English
 - three courses of two units' value (or greater)
 - four subjects.
3. No more than six units of courses in science can contribute to eligibility for the HSC.

The industry curriculum frameworks provide for a number of course structures, including 120, 180 and 240 hour courses, with the possibility of 60 and 120 hour extensions. Only the 240 hour courses offer the opportunity to undertake a written examination, which is a requirement if the course is to contribute to a student's UAI.

Students wishing to include an industry curriculum framework in their UAI need to sit an examination. All

students undertaking one of the above industry curriculum frameworks will:

- have the course recorded on their HSC Record of Achievement
- receive a Statement of Attainment and/or Certificate at the appropriate level
- have a competency record book recording all competencies and/or elements of competency achieved
- receive a TAFE Transcript of Academic Record where part of the course is delivered by TAFE.

Each industry curriculum framework will have a separate examination, which will comprise the following features:

- centrally set and marked
- based on identified 240 hour course pattern
- three sections
- marked out of 80 and converted to a final mark out of 100.

Any student who chooses to undertake this examination will sit for the same paper regardless of where the course was delivered. The issue of when students can choose to opt in or out of the examination is currently subject to discussion. Schools will be provided with advice on this in Term 3, 1999.

Each examination will comprise:

- 15 multiple choice questions worth 1 mark each
- short answer questions worth a total of 35 marks
- 2 extended responses worth 15 marks each.

There is no longer a requirement for a centrally set practical examination. Although the practical examination in Industry Studies was highly valued, the results were not a good predictor of success at university. Schools that delivered Industry Studies may use the structure of the practical examinations in designing their assessment events. The practical examinations in both Hospitality and Metal and Engineering were good examples of integrated assessment events.

Designing assessment events

The following table outlines some methods of assessment that can be used in the design of assessment events for the delivery of the industry curriculum frameworks.



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Methods of assessment	Specific purposes and recommended uses	Advantages and strengths	Practical considerations
<p>Written tests</p> <p>Multiple choice items</p> <p>Objective written responses</p> <p>Open short response</p> <p>Open extended response</p>	<ul style="list-style-type: none"> • Factual and procedural knowledge • Understanding of principles • Application of knowledge • Evaluation of information • Application of knowledge • Generating ideas and solutions 	<ul style="list-style-type: none"> • Effectively tests for underpinning knowledge • Reliability in testing • Uniform and standardised • Assesses complex sets of skills, including higher order thinking and problem solving 	<ul style="list-style-type: none"> • Cost effective • Can be difficult to write • Efficient to use • Reliability of judgement • Expensive to process
<p>Oral assessment</p>	<ul style="list-style-type: none"> • Interpersonal skills • Workflow/sequence planning • Approaches to problem solving 	<ul style="list-style-type: none"> • Assessment of thinking skills • Assessment across a number of dimensions 	<ul style="list-style-type: none"> • Reliability of judgement • Readily administered
<p>Projects or simulations for assessment of performance or final product</p>	<ul style="list-style-type: none"> • Practical/psycho-motor skills - ability to produce products or demonstrate skills 	<ul style="list-style-type: none"> • Holistic and direct assessment of skills 	<ul style="list-style-type: none"> • Reliability of judgement • Logistical difficulties • Resource implications
<p>On the job assessment (workplace observation)</p>	<ul style="list-style-type: none"> • Overall skills performance • Assessing competency for specific job functions • Interpersonal skills 	<ul style="list-style-type: none"> • Directness of assessment in a range of realistic conditions • Provides evidence of occupational competence • High degree of validity 	<ul style="list-style-type: none"> • Dependent on supervisor's judgement • Resource implications • Duration of assessment

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Professional development for the industry curriculum frameworks

Throughout Terms 3 and 4 there will be a number of VET events occurring in districts throughout NSW. The days will be coordinated by the district vocational education consultant. (The contact names and details of these consultants were included in the last issue of **CURRICULUM SUPPORT**). The day will be presented by consultants from across the government and non-government sectors.

It must be noted that attendance at the professional development days does not affect the teacher's accreditation. Decisions as to who will attend the two days will be made at a school or college level.

Application forms can be found in your school and on the New HSC web site. Completed application forms should be sent to your district vocational education consultant.

The days are not industry-specific; however, teachers will be divided into industry-specific groups on the day.

The day will comprise the following information:

- Overview of changes to VET in the HSC

Teachers will be provided with an overview of reforms to the HSC within a context of reforms to training nationally. The session focuses on the impact of such reforms to the school environment and includes an overview of the features of each framework.

- Explanation of course structures

This session is divided into industry-specific groups. Each group will be provided with advice and information about the parts of the frameworks they can deliver with their current qualifications.

Also included in this session is clear advice about unit values and hours.

- Assessment and reporting

This session will provide teachers with all the policy and procedures related to assessment and reporting for the purposes of the UAI, the HSC and the AQF. The session includes a workshop that will provide teachers with an opportunity to develop assessment events that can be used in the delivery of the course.

- Work placement

This session will provide teachers with information relating to the conduct of work placements. Issues relating to timetabling, appropriate workplace programs and assessment in the workplace will be covered in this session. This session will also include a workshop where participants can share ideas and design their own work placement program.

- School organisation

This session is focused on providing strategies to assist schools to facilitate the implementation of an industry curriculum framework. The session will also include strategies for designing programs.

- Issues

The day will conclude with a discussion of any unresolved issues related to the implementation of the new frameworks.

Release of information package on industry curriculum frameworks

The Vocational Programs for Schools Unit has developed an *Industry Curriculum Frameworks Information Package (ICFIP): Vocational Education in the New HSC* to support schools in the implementation of vocational education in the new HSC.

The ICFIP replaces the *Dual Accredited Vocational Courses Information Package (DAVCIP)*, issued to schools in 1995 and subsequently updated in 1996 and 1997. Schools delivering non-framework vocational courses (i.e. Industry Studies and vocational content endorsed courses, excluding Furnishing and Electronics) to Year 11 in 1999 and Year 12 in 2000 will be required to retain their (current) DAVCIP to help ensure that they meet all quality assurance requirements in the delivery of the non-framework courses.

The ICFIP will be provided as hard copies to each secondary and central school in Term 3.

Schools will use the ICFIP for similar purposes as the DAVCIP with specific application to the new industry curriculum frameworks. The new industry curriculum frameworks are:

- Primary Industries
- Metal and Engineering



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- Retail *
- Business Services (Administration)
- Construction
- Information Technology
- Tourism and Hospitality.

The frameworks are based on national competency standards that have been defined by industry in their national training packages. Each framework consists of vocational HSC courses that are aligned to these competency standards and that lead to nationally recognised qualifications under the Australian Qualifications Framework (AQF). AQF qualifications, based on national competency standards, form the foundation of the national VET system in Australia.

Industry curriculum frameworks represent an important and fundamental link between schools and the national VET system.

The ICFIP will contain the following information:

1. A general section

This section provides information on a number of aspects of industry curriculum frameworks that are common to all the framework courses. It includes advice on:

- the national vocational education and training system
- quality assurance requirements and processes for compliance with the Australian Recognition Framework (ARF)
- private training providers
- part-time traineeships in schools
- teacher training issues and requirements
- workplace learning issues and requirements
- articulation arrangements for vocational HSC courses
- vocational HSC courses for students with disabilities.

2. Framework courses

This section provides advice on the following aspects of each of the industry curriculum frameworks:

- courses within each framework

* Please note: There is no requirement for students to undertake mathematics as a corequisite for the Retail Industry Curriculum Framework. Students undertaking the framework should have fundamental skills in the use of the four mathematical operations and percentages.

- recognition and articulation
- special features and conditions
- course structure
- teacher training requirements
- monitoring quality assurance requirements.

It also provides checklists that address the following ARF requirements:

- teacher qualifications
- student work placement
- student assessment
- units of competency delivered/assessed
- resources/equipment.

These checklists have been designed to be photocopied and completed by teachers responsible for implementing these courses. Principals will be required to sign these documents to confirm that the delivery of the courses has complied with the requirements of the ARF.

The ARF is the quality assurance mechanism that regulates which training organisations can be registered to deliver and/or issue AQF qualifications. To become a registered training organisation (RTO), training organisations must demonstrate to the NSW Vocational Education and Training Accreditation Board (VETAB) that they are operating in accordance with the principles and standards of the ARF.

It is essential that these requirements are met so that vocational courses delivered by schools are recognised by industry and other registered training organisations. The ICFIP will ensure that the implementation of these courses occurs in a manner consistent with the principles and standards of the ARF.

3. Non-framework courses

At this stage national training packages have not been developed in these areas, and the following vocational content endorsed courses will continue to be available to students in Years 11 and 12 in 2000:

- Furnishing
- Electronics.

Information and checklists similar to that for framework courses are provided for the above courses.

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Delivery of frameworks by secondary teachers

Framework courses and units of competence that can be delivered with VET teachers' current qualifications:

Retail

120 hours–Retail Operations
240 hours plus 60 hour extension (General Selling) Retail Operations

Business Services (Administration)

120 hours–Business Services (Office Administration)
240 hours–Business Services (Office Administration)
(NB: 1 unit TEC203 requires demonstration of competency prior to delivery)

Construction

120 hour–Construction
180 hour–Construction
240 hour–Construction (Generic or Civil) in the following pattern of study *only*:
HSC core plus
BCC 1003A Drain/de-water
BCC 1009A Carry out manual excavations
BCC 1012A Spread and compact materials manually
BCG 1010A Carry out concreting to simple forms

Primary Industries

The compulsory units of competency in the framework and the units of competency in the General Agriculture strand of the framework *except*:

ME 9.1A Draw and interpret sketch
ME 18.1A Use hand tools
ME 18.2A Use power tools/hand held operation
ME 5.5A Carry out mechanical cutting
ME 5.7A Manual heating thermal cutting and gauging
ME 5.3A Mark off/out structural fabrications and shapes
ME 9.2A Interpret technical drawing

Information Technology

120 hour–Information Technology Foundations
180 hour–Information Technology
240 hour–Information Technology

Tourism and Hospitality

The core units of competency in the framework and specific units of competence in which teachers have been assessed.

Metal and Engineering

All units of competency in the framework *except*:
9.4B Electrical/electronic detail drafting
9.9B Create 2D drawings using computer aided design system
9.10B Create 3D models using computer aided design system
9.11B Apply basic engineering design concepts
3.4A Electronic/electrical assembly (production)
7.15A Set NC/CNC machines/process (basic)
7.24A Operate and monitor machine/process
13.1A Perform emergency First Aid

Note: Teachers who have other recent and relevant qualifications or experience may wish to seek exemption from some components of training or eligibility to teach additional units of competency.

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New publications

Currently five publications are being produced by the Vocational Programs for Schools Unit. They are scheduled for distribution to schools during August and September and include:

Industry Curriculum Frameworks Information Package: Vocational Education in the New HSC

An information package outlining the teacher qualifications and physical resource requirements necessary to deliver vocational HSC courses within industry curriculum frameworks. This package replaces the *Dual Accredited Vocational Courses Information Package* (DAVCIP).

TAFE Delivered Vocational HSC Courses for Schools 2000

This curriculum manual outlines the VET courses for school students that can be delivered by TAFE NSW. It was previously known as *JSSTAFE Ideas for Courses*.

TAFE Delivered Vocational HSC Courses for Schools 2000: Guidelines and Procedures

This document provides details of relevant policies and outlines procedures that schools and TAFE colleges must follow when seeking to implement TAFE delivered VET courses for school students.

Part-time Traineeships in NSW Schools 2000: Guidelines and Operational Procedures

This document contains the relevant policies and procedures for the implementation of part-time traineeships in schools in the year 2000.

Part-time Traineeships in NSW Schools 2000: Reference and Support Materials

This document contains information about curriculum, roles and responsibilities, and contact details for key staff involved in the implementation of school-based part-time traineeships.



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Supporting VET in the new HSC

Case studies of NSW secondary school timetables and organisation

As one of the activities planned to support the implementation of the new Higher School Certificate and the expansion of VET for schools in NSW, the Vocational Programs for Schools Unit in the NSW Department of Education and Training recently undertook a cross-sectoral project on innovative secondary school timetables and organisation. The project aimed to investigate processes of change and gather examples of innovation. The project was overseen by a reference group composed of representatives from the three school sectors, including school-based and State Office personnel.

The outcome of the project is a document of case studies entitled *Supporting VET in the new HSC: Case studies of secondary school timetables and organisation*. The case studies represent a broad range of current school structures across the state. Each of the schools in the case studies has begun to customise its structures to best meet its students' needs.

Schools from the different systems were selected on the basis of size, geographical location, characteristics of the student population, and innovative structures and programs already in place. The project schools have demonstrated that they share facilities or staff, implement programs across year levels, have structures that enable students to move from school to the site of delivery, overcome barriers caused by distance and transport, or utilise telematics to ensure access by students in rural and isolated localities.

Participating schools were nominated by chairs of Local VET in Schools Committees, district vocational education consultants, TAFE Institute consultants, Catholic Education Commission diocesan advisers, and representatives of the Association of Independent Schools.

The document formed the basis of Local Interest Group (LIG) events, entitled "Structures and Organisation", conducted throughout NSW in June 1999. These LIG events were organised by the *Securing their Future* team based in the NSW

Department of Education and Training and were attended by the principal or deputy principal and one other member of the school executive from each secondary school in NSW. Staff representatives of each secondary school throughout NSW received their copies at the LIG events throughout the state.

Many secondary schools have taken steps to utilise innovative, creative management strategies and structures in order to offer a broader curriculum and better meet the needs of their changing student populations. This publication, which relates the experiences of fourteen different school communities, will be of enormous benefit in promoting the models they have developed and the change processes they have undergone. The report has the potential to be of considerable use to other schools across the state.

Whilst the case studies formed the basis of the LIG events associated with the implementation of the new HSC, they will also lend themselves to other district-based training and development activities planned for later this year.

The document is available at the following web site: <http://www.newhsc.schools.nsw.edu.au/vet/index.htm>

For further information, please contact Bronte Price of the Vocational Programs for Schools Unit, NSW Department of Education and Training, telephone (02) 9244 5060.