Ceramics
Content Endorsed Course
Stage 6

Syllabus
1 The Higher School Certificate Program of Study

The purpose of the Higher School Certificate program of study is to:

• provide a curriculum structure that encourages students to complete secondary education;

• foster the intellectual, social and moral development of students, in particular developing their:
  – knowledge, skills, understanding and attitudes in the fields of study they choose
  – capacity to manage their own learning
  – desire to continue learning in formal or informal settings after school
  – capacity to work together with others
  – respect for the cultural diversity of Australian society;

• provide a flexible structure within which students can prepare for:
  – further education and training
  – employment
  – full and active participation as citizens;

• provide formal assessment and certification of students’ achievements;

• provide a context within which schools also have the opportunity to foster students’ physical and spiritual development.
2 Rationale for Ceramics in Stage 6 Curriculum

Ceramics is the art and technology of forming, firing and glazing clay to make a range of products. Clay, the basic material used in this process, is inexpensive, abundant and found in many locations throughout the world.

This natural material, which is plastic, malleable and pliant, lends itself to many applications ranging from building materials to ceramic ware, eg plates, bowls and drinking vessels, jewellery, sculptures and decorative wall surfaces. Clay can be used, in its fired form, in diverse applications that range from massive architectural forms to the production of delicate objects such as translucent vessels and bowls. It can be fired to produce an extremely hard and durable material or one that is soft enough to carve. Various methods can be used to form clay as unique one off handbuilt works, wheel-thrown and cast forms, and those which are mass-produced. It lends itself to a wide range of surface treatments that include oxides, resists, incising and inlaying. It comes in a wide range of colours including terracottas, white kaolins, and manganese blacks, and can be subject to an infinite number of finishes and glazes.

Practices of working with clay and ceramics date back to the earliest civilizations and many of these practices are still relevant. In early societies and cultures clay was often used for making objects basic to everyday life. Utilitarian objects and other less utilitarian works made in clay such as sculptures and relief panels embodied and continue to embody for contemporary audiences the cultural values and beliefs of the people who make them. These works offer contemporary audiences insights into the cultural production of the past and present. They also offer imaginative and aesthetically beautiful interpretations of working in clay. In these works we can understand the importance of conventions, traditions, and the communication of messages and meanings within ceramic forms. We can also note how the past is reinterpreted in works that question the traditions and power relations of previous practices.

Contemporary applications in ceramics are constantly changing. New industrial and high technology uses are being found and ceramists, artists and designer/makers are exploring new expressive forms and meanings. In contemporary societies that are becoming increasingly synthetic and depersonalised, ceramics offers students opportunities to reinterpret the world and develop a sense of personal satisfaction and achievement. It encourages an empathy with the properties of natural materials and an opportunity to experience the deep pleasure and satisfaction which comes from transforming these materials into objects which have personal meaning and significance. Ceramics provides challenging work opportunities for students with knowledge, skills and understanding in areas including studio and industrial ceramics, ceramic research, engineering and product design.
3 Continuum of Learning for Ceramics Stage 6 students

Students of Ceramics bring a range of K-10 and other life experiences as background to their study. The Content Endorsed Course structure enables the selection of modules that recognise and build upon students’ knowledge, understandings and skills through further and more in-depth study of this area.

The study of Ceramics will support students in developing a commitment to and capacity for lifelong learning in this area. This may lead to further post-school study at University or TAFE or vocational training in the context of the workplace. Learning may also continue through life as an area of personal interest.

Students enroll in the Ceramics CEC from a diverse range of backgrounds in both ceramics and visual arts. They may have studied ceramics as one of the forms available in the Stage 4 Mandatory course and the Stage 5 Visual Arts additional study course. Some students may have studied Ceramics as a school designed Board Endorsed Course. The CEC builds upon this knowledge and would allow students access to further and more in-depth study of this artform.

Students may also have participated in ceramics as an outside endeavor for personal interest. This CEC can both further and formalise this study.
4 Aim

Ceramics Stage 6 is designed to enable students to:
Gain an increasing accomplishment and independence in their representation of ideas in ceramics and understand and value how ceramics, as a field of practice, invites different interpretations and explanations.

5 Objectives

Students will develop knowledge, skills and understanding:
• through the making of ceramic work that leads to and demonstrates conceptual and technical accomplishment;
• that lead to increasingly accomplished critical and historical investigations of ceramics.
6 Course Structure

The Ceramics Content Endorsed Course is comprised of eleven modules, two mandatory and nine optional. Schools are able to select from these modules to develop programs that respond to student needs and interests. The Core module *Introduction to Ceramics* must always be done as the first module. Issues of Work Health and Safety must be considered over the entire course.

The time allocated to each of the optional modules is flexible within the range of 20 – 40 hours. When deciding on the duration of modules, consideration should be given to:

- the time required to achieve outcomes
- the level to which outcomes will be achieved
- the extent to which the module will be explored,
- the requirements of TAFE courses for, which there may be potential for, credit transfer.

The Ceramics Content Endorsed Course is structured in the following way:

**Mandatory:**

<table>
<thead>
<tr>
<th>Module Number</th>
<th>Hours</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>40</td>
<td>Introduction to Ceramics (Core)</td>
</tr>
<tr>
<td>2</td>
<td>4–6</td>
<td>Work Health and Safety</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Integrated module)</td>
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</tbody>
</table>

**Optional modules:**

<table>
<thead>
<tr>
<th>Module Number</th>
<th>Hours</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>20–40</td>
<td>Handbuilding</td>
</tr>
<tr>
<td>4</td>
<td>20–40</td>
<td>Throwing</td>
</tr>
<tr>
<td>5</td>
<td>20–40</td>
<td>Sculptural Forms</td>
</tr>
<tr>
<td>6</td>
<td>20–40</td>
<td>Kilns</td>
</tr>
<tr>
<td>7</td>
<td>20–40</td>
<td>Glaze Technology</td>
</tr>
<tr>
<td>8</td>
<td>20–40</td>
<td>Casting</td>
</tr>
<tr>
<td>9</td>
<td>20–40</td>
<td>Surface Treatment</td>
</tr>
<tr>
<td>10</td>
<td>20–40</td>
<td>Mixed Media</td>
</tr>
<tr>
<td>11</td>
<td>20–40</td>
<td>Ceramics Project</td>
</tr>
</tbody>
</table>

The modules outline the content to be taught within each of modules that can be undertaken for 20–40 hours. Each module makes explicit references to practice, ceramic objects and works, frames, construction methods, surface treatments and technologies. These have different emphases in the modules and over the course teachers will offer students.
### Possible course options:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Hours</th>
<th>Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year (Year 11 or Year 12)</td>
<td>1</td>
<td>60</td>
<td>• 40 hour Core</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• one 20 hour module</td>
</tr>
<tr>
<td>1 year (Year 11 or Year 12)</td>
<td>2</td>
<td>120</td>
<td>• 40 hour Core</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• between 2 and 4 modules totaling 80 hours</td>
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<tr>
<td>2 year (Year 11 and Year 12)</td>
<td>1</td>
<td>120</td>
<td>• as for 1 year, 2 unit course above</td>
</tr>
<tr>
<td>2 year (Year 11 and Year 12)</td>
<td>2</td>
<td>240</td>
<td>• 40 hour Core</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• 200 hours of optional modules</td>
</tr>
</tbody>
</table>
## 7 Objectives and Outcomes

### 7.1 Table of Objectives and Outcomes

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Outcome</th>
<th>Related Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>The student will: develop knowledge, skills and understanding through the making of ceramic works that lead to and demonstrate conceptual and technical accomplishment</td>
<td>M1: generates a characteristic style that is increasingly self-reflective in their ceramic practice</td>
<td>Modules 1–11</td>
</tr>
<tr>
<td></td>
<td>M2: explores concepts of artist/ceramist/sculptor/designer/maker, interpretations of the world and of audience response in their making of ceramic works</td>
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<tr>
<td></td>
<td>M3: investigates different points of view in the making of ceramic works</td>
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<tr>
<td></td>
<td>M4: explores ways of generating ideas as representations in the making of ceramic works</td>
<td></td>
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<tr>
<td></td>
<td>M5: engages in the development of different techniques suited to artistic intentions in the making of ceramic works</td>
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<td></td>
<td>M6: takes into account issues of Work Health and Safety in their practice</td>
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<tr>
<td></td>
<td>CH1: generates in their critical and historical investigations ways to interpret and explain ceramic works and practices</td>
<td>Modules 1–11</td>
</tr>
<tr>
<td></td>
<td>CH2: investigates the roles and relationships of the concepts of work, world, artist/ceramist/sculptor/designer/maker and audience in critical and historical investigations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CH3: distinguishes between different points of view in their critical and historical studies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CH4: explores ways in which histories, narratives and other accounts can be built to explain practices and interests in ceramics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CH5: recognises how ceramic works are used in various fields of cultural production</td>
<td></td>
</tr>
</tbody>
</table>

**Please note:**

M — relates to making ceramics

CH — relates to critical and historical studies in ceramics

The terms artist, ceramist, sculptor, designer and maker refer to those who work in the field of ceramics, and are often used interchangeably.
Values and Attitudes Outcomes

Students should be encouraged to:

• appreciate the characteristics of practice in ceramics in making and in the critical and historical investigations of this field
• appreciate the role and contribution of the ceramics artist/designer in different cultures
• appreciate the different meanings ceramic works can sustain and their material properties
• appreciate the different ways the world can be interpreted in ceramic works
• value the role of an audience as a body of critical consumers and appreciate opportunities to view ceramics as audience members
• value how significant interpretations of ceramics are sustained.

7.2 Key Competencies

Ceramics Stage 6 Content Endorsed Course provides a context within which to develop the general competencies essential to acquire the effective, higher-order thinking skills necessary for further education, work and everyday life. Key competencies are embedded in Ceramics to enhance student learning in the following ways.

In collecting, analysing and organising information, students learn to select information to be adapted and shaped in their own investigations of ideas, ceramic practices and works. They consider how information can be analysed and used to represent new interpretations of ideas. In communicating ideas and information, Ceramics students develop skills in representing their ideas in practice and explore different ways of communicating these ideas to audiences of ceramics. Students of ceramics are constantly planning and organising activities in their making and critical and historical studies. Students learn to plan courses of action in the development of their works, for example, preparing clays for the use in the making of slab pots, organising a working space to use different tools and equipment effectively, or noting the time required for a kiln to reduce in temperature so that it can be unpacked. Their research also involves students in planning and organising in their critical and historical investigations. In Ceramics, students learn to work with others and in teams through group work, discussions, research, debates and in the making of collaborative works. They learn to work cooperatively and consider the work of others in sharing resources. Ceramics students learn to use mathematical ideas and techniques in judging proportions, sizes, measurements and spatial relationships. Work with glaze technology and kiln work, in particular, require specific mathematical skills and knowledge. Solving problems is essential to this syllabus and to the study of ceramics. Students make judgments about the appropriateness of actions and procedures to solve problems in their making and critical and historical studies. In Ceramics students develop skills in using technology. These include the traditional technologies including the use of wheels and kilns, those associated with handbuilding and newer digital technologies which can be accessed on the internet for research, visiting websites or exhibitions.
8 Modules

Approaches to the modules

The content of each module is outlined and can be undertaken for 20-40 hours. Each module makes explicit references to practice, ceramic objects and works, frames, construction methods, surface treatments and technologies. These have different emphases in the modules and over the course that teachers will offer students.

Practice

Practice refers to the actions and sequences that affect choices, directions, and ways of working in ceramics. Practice involves the inculcation of beliefs and values over time. A notion of practice will affect such things as students’ intentions, interests, interpretations and their exercise of critical reflection and judgement. Practice relates to learning opportunities offered in making and in critical and historical study.

Ceramic objects and works

This refers to the different types of works and objects that students can learn about and learn how to make in ceramics, for example, containers, sculpture, jewellery and relief works.

Construction methods

Students’ making should include explorations of clay and the ways in which it can be formed, shaped and joined. Learning about clay and learning how to work with clay should include the construction methods of building (including pinching, coiling, slab construction and slab/coil combinations), throwing (including centring, pulling up and turning) and casting (including the use of moulds and slip casting). Critical and historical studies should also take account of various construction methods.

Surface treatments

Students’ making should include either applied or subtracted surface treatments or combinations of these. Applied surface treatments include engobes, oxides, wax resist, slips, dipping, pouring, brushing, trailing and burnishing. Subtracted surface treatments include incising, impressing, stamping and inlaying. Critical and historical studies should also take account of various surface treatments.

Technologies

Students should learn about the technologies involved in ceramics that are essential to learning how to work with ceramics. These include health and safety, properties of clay, properties of glazes and finishes, tools and equipment, and kilns and firing processes.

Frames

Students learn about and learn to understand ceramics as a field of practice within the broader field of Visual Arts in making and critical and historical study. The frames can orientate different investigations and represent different beliefs, values and philosophical views.
The subjective frame — *personal and psychological experience*. Through this frame, ceramics may be thought to be about deeply felt and sensory experience, intuition and imagination. Meaning is understood in relation to the inter-subjective experiences afforded to the maker and viewer.

The cultural frame — *cultural and social meaning*. Through this frame, ceramics may be thought to be about and to represent the collective interests of cultural groups, ideology, class, politics, gender, and the celebration of spiritual and secular beliefs, events and objects. From this view meaning is understood in relation to the social perspective of the community out of which it grows. Some areas of investigation in critical and historical studies may include: cultural traditions and conventions in ceramics evidenced in a range of cultures such as Japanese, African, Greek, Etruscan, Roman, Renaissance, North American, Central American, and South American; Modern and Folk Art traditions; Australian traditions in ceramics such as the Bendigo Pottery, East Sydney Technical College and Sturt Workshop; studies of individual potters and their works; purpose of ceramics in different cultures, eg religious rituals, adornment and jewellery; the work of the studio potter, etc.

The structural frame — *communication and the systems of signs*. Through this frame, ceramics may be thought to be about and represent a visual language as a symbolic system, a system of relationships between signs and symbols that are read and understood by ceramists and audiences who are able to decode texts. From this view meaning is understood within the relationships of symbols used to refer to the world. Through this system ideas are circulated and exchanged.

The postmodern frame — *ideas which challenge mainstream values of histories and ideas*. Through this frame, ceramics may be thought to be about and represent ‘texts’ that reconfigure and question previous texts and current narratives. These are woven together through such things as irony, parody, and quotation. From this view meaning is attained through critique, exposing the patterns of authority and assumptions of mainstream values in the visual arts to reveal inconsistencies, uncertainties and ironies.

Note: ‘Learning to’ includes ‘learning about’ in the content of the modules that follow.
8.1 Module 1

**Module Title**  
Introduction to Ceramics

**Indicative Hours**  
40

**Course Outcomes**  
M1, M2, M3, M4, M5, M6, CH1, CH2, CH3, CH4, CH5

**Module Description**  
This module provides students with an introduction to the study of ceramics that is then extended through the other modules. In providing core experiences for students, teachers must ensure that references to the areas of learning as described on pages 11 and 12 are included in their programs.

**Content**

In this module students learn to:

- recognise the importance of intentions, research, experimentation and innovation within their ceramic practice
- develop and refine the conceptual and material aspects of their practice through the exercise of critical reflection and judgment
- investigate the nature of ceramics as a practice that involves making and critical and historical study
  - use one or more of the following construction methods:
    - pinching (open, closed or sculptural forms)
    - coiling (hand rolled or extruded coils to make a range of functional or sculptural forms)
    - slab construction (rolled, wire-cut or stretched slabs to make a range of forms including tiles)
    - throwing (cylinders, spheres, bowls and platter forms)
    - casting (hump moulds, press moulds and slip casting moulds to make a range of forms)
  - or a combination of the above techniques
- gain practical knowledge of a range of surface treatments:
  - applied (such as coils, sprigging, burnishing, wax resist, engobes, oxides and glaze)
  - subtracted (such as incising, impressing, stamping, piercing and inlaying)
- produce a range of ceramic forms, both functional and decorative, such as:
  - containers
  - sculpture
  - murals and bas-relief
  - jewellery
  - other appropriate forms and objects
- recognise the importance and significance of technologies in ceramics, including:
  - the identification of hazards and the development of safe working practices and environments
  - composition of different clay bodies, clay preparation, differences in firing temperatures, porosity, vitrification, thermal shock, shrinkage, warpage and specific uses
  - composition and function of glazes, underglazes and on-glazes used for specific purposes
  - the specific function and use of various tools and equipment in the construction, forming, decoration and firing of ceramic forms
  - kiln types and the different cycles and functions of a bisque and glaze firing
• use one or more of the Frames to focus investigations in making and the critical and historical study of ceramics. For example:
  – **Structural**: consider such things as proportion, scale, balance, mass, space, shape, volume, and surface. Analyse the visual organisation and the relationships of individual parts of a work. Consider the suitability of form to function and recognise the symbolic meanings of painted-on shapes and forms, eg urns, bowls, amphoras
  – **Subjective**: consider the pleasure of working with clay and the satisfaction derived from manipulating such a malleable and pliant material. Investigate ways in which ceramists and sculptors use imagination and personal investigation to explore possibilities through ceramics. Explore ways in which individuals develop ceramic practices and feelings about working with clay
  – **Cultural**: investigate the traditions, conventions and purpose of ceramics in different cultures, for example, ceramics for religion and rituals, adornment and jewellery, functional and mass-produced items, decorative, aesthetic, unique and contemplative forms, and high technology industry. Investigate different ceramic practices and consider these in relation to their own developing sense of practice, for example, the studio potter, the craft industry and mass production
  – **Postmodern**: investigate ways in which ceramic forms and ceramists may challenge traditions and conventions associated with ceramics. Investigate ways in which ceramists appropriate culturally significant forms, and challenge the principles of design and classical ideals such as balance, order and purity in unexpected witty or provocative ways.
8.2 Module 2

**Module Title**

Work Health and Safety

**Indicative Hours**

4–6 (depending on the length of the course)

**Course Outcomes**

M6

**Module Description**

This module provides students with the opportunity to develop a positive attitude towards safe and professional practice in ceramics. It could be delivered as an integrated module during the course as is appropriate to the content of other modules.

**Content**

In this module students learn to:

- identify, assess, and adopt strategies to reduce or eliminate chemical, psychological and physical problems and hazards associated with working environments
- explain the importance of Work Health and Safety and the characteristics of a safe working environment in their developing practice
- describe appropriate strategies and utilise these in the management of hazards in studio situations. Students should seek to create and maintain a safe working environment and recognise ways to solve specific issues, eg ensure the safe handling of clay and glazes, safe disposal of clay products, glazes and dusts, ensure the work space has adequate exhaust ventilation, and use personal protection equipment such as aprons when working with clay and gloves when using glazes
- differentiate the categories of hazards which can affect their own practice and those of other ceramists. Chemical hazards could include fumes, vapours, gases and dusts. Physical hazards could include manual handling and badergonomics, overuse injuries, electricity, machinery, fire
- identify the major risks associated in working with ceramics such as chemicals, glazes, wheels, kilns and other electrical equipment.
8.3 Module 3

**Module Title**

Handbuilding

**Indicative Hours**

20–40

**Course Outcomes**

M1, M2, M3, M4, M5, M6, CH1, CH2, CH3, CH4, CH5

**Module Description**

This module provides students with the opportunity to develop and extend their skills in selected handbuilding methods such as slab, pinch and coil techniques. Students will learn about and also learn to create ceramic forms that demonstrate increased refinement and skill in selected handbuilding methods. Students will engage in the critical and historical study of ceramic traditions and the conventions of various cultures and ceramists to inform their practice.

**Content**

In this module students learn to:

- recognise the importance of intentions, research, experimentation and innovation within their ceramic practice
- develop and refine the conceptual and material aspects of their practice through the exercise of critical reflection and judgment
- investigate coil-building methods to create large, complex and refined ceramic forms
- make ceramic forms using extruded coils and decorative coil-joining techniques
- combine handbuilt techniques (such as pinch forms extended with coil techniques or slab forms extended with coil techniques) to create more complex ceramic forms
- apply various surface treatments and decorations to complement forms in appropriate ways (such as carving, sprigging, inlaying, burnishing, slip application, glazing or other appropriate methods)
- consider practice in various traditions and in their own practice, noting how decisions and choices are made
- appreciate handbuilt ceramic forms and traditions in different cultures
- use one or more of the Frames to focus investigations in making and the critical and historical study of ceramics. For example:
  - **Structural**: the relationship between form, function and surface decoration in ceramic forms and the relationship between scale and proportion in ceramic works
  - **Subjective**: the ways individuals and groups of people develop practices and feelings about working with clay. The ways ceramists use imagination, skills and techniques to explore possibilities in one-off works
  - **Cultural**: the role and purpose of ceramics and the ceramist in different cultures and the understanding of aesthetic and contemplative forms in contrast to functional wares in various cultures
  - **Postmodern**: the ways in which contemporary ceramic artists utilize and challenge traditions and conventions associated with ceramics, handbuilt forms and techniques; the appropriation of well known forms and images in the creation of new works.
8.4 Module 4

**Module Title**  
Throwing

**Indicative Hours**  
20–40

**Course Outcomes**  
M1, M2, M3, M4, M5, M6, CH1, CH2, CH3, CH4, CH5

**Module Description**  
This module provides students with opportunities to develop the necessary skills for the production of a range of wheel-thrown forms and the making of forms in multiples. This will give students the opportunity to refine wheel throwing techniques in the elaboration of a basic form and the creation of a series of works. The study of significant cultures and crafts people will further inform students’ practice.

**Content**

In this module students learn to:
- recognise the importance of intentions, research, experimentation and innovation within their ceramic practice
- develop and refine the conceptual and material aspects of their practice through the exercise of critical reflection and judgment
- ‘throw’ clay forms using a wheel which involves centring, opening up forms, pulling up walls, collaring, forming rims and lips, and the turning of leather-hard forms
- differentiate between wheel-thrown forms and vessels such as cylinders, bowls, vases, bottle forms, lidded containers, teapots, plates, jugs or other functional work
- make clay appendages such as handles, knobs, lugs and spouts and discuss their relationship to forms in the production of vessels
- relate form to function in the design of particular works
- use surface treatments such as sgraffito, underglazing, glazing and onglazing to enhance the aesthetic treatment of form and function
- create a series of related works
- use one or more of the Frames to focus investigations in making and the critical and historical study of ceramics. For example:
  - **Structural**: the conventions of craftsmanship in throwing, such as even thickness, minimal need for turning, the forming and articulation of feet, rims, knobs and the application of handles and lugs
  - **Subjective**: the considerations made in the simplification or distortion of forms for imaginative use and the changing of the relationships of parts that arise from experimentation
  - **Cultural**: the significance of traditions and styles in cultures such as China, Japan and England and the relationship to what students might produce
  - **Postmodern**: the approaches of crafts people who use thrown forms to reinterpret and reinvent themes such as the vessel for different purposes, eg Jeff Mincham.
8.5 Module 5

**Module Title**  
Sculptural Forms

**Indicative Hours**  
20–40

**Course Outcomes**  
M1, M2, M3, M4, M5, M6, CH1, CH2, CH3, CH4, CH5

**Module Description**  
This module provides students with the opportunity to explore the properties of clay in ways that make use of this medium in order to create sculptural forms. Students will learn to create sculptural works with an emphasis on making conceptually strong works which demonstrate technical expertise in the use of clay. Students will engage in the critical and historical study of ceramic sculptors and traditions to inform their practice.

**Content**

In this module students learn to:

- recognise the importance of intentions, research, experimentation and innovation within their ceramic practice
- develop and refine the conceptual and material aspects of their practice through the exercise of critical reflection and judgment
- interpret the world — experiences, people and events — as sources of ideas to create powerful statements using clay as the medium
- manipulate clay to create two-dimensional (relief sculpture) and three-dimensional (sculpture in the round) forms
- create large and small-scale works and find solutions to the problems associated with producing these forms: for example, firing works in sections, shrinkage, and structural problems of large scale works, drying of solid and large works, fragility of small and delicate works and other associated problems
- combine handbuilding techniques (such as coil, pinch, slab) to create sculptural forms demonstrating refined skills in carving, sprigging, modeling, joining or other appropriate methods
- use extruders, slab rollers and imprinting of textures to create unusual relief and surface decoration in works
- create casts of small works into plaster molds for reproduction
- cast one and two piece moulds
- explore surface and finishing techniques such as stains, slips, underglazes and glazes to enhance their works
- join clay forms (keying pieces together) to create monumental works
- explore the purpose of works, finish of works and where they will be viewed (for example, in the garden, in a foyer, from a ceiling etc)
- investigate sculptures from various cultures (such as Japanese garden lanterns, Roman busts, Mochica culture stirrup head vases, Greek figures, Egyptian canopic jars and figures, Chinese horses and figures) to inform their own practice
- use one or more of the Frames to focus investigations in making and the critical and historical study of ceramics. For example:
  - **Structural**: the elements and conventions used in sculpture such as form, mass, void, surface, texture, size and colour in order to convey meaning and ideas and how this is read by an audience
- **Subjective**: the approaches used in works which explore the sculptor’s imagination, environment and personal experiences and how audiences respond through association and their own interpretations of the works
- **Cultural**: the contexts and issues that affect the forms, materials and techniques used by ceramic sculptors at various times and how these inform students’ practice
- **Postmodern**: the innovative use of technology to appropriate and transform more traditional subjects in clay and related materials, providing witty, shocking comment or parodying previous works.
8.6 Module 6

**Module Title**  
Kilns

**Indicative Hours**  
20–40

**Course Outcomes**  
M1, M2, M3, M4, M5, M6, CH1, CH2, CH3, CH4, CH5

**Module Description**  
This module provides students with an awareness of different kiln types, firing processes and the typical aesthetic results achieved from each. Students are provided with the opportunity to pack and fire kilns. An awareness of health and safety issues is also promoted.

**Content**

In this module students learn to:

- recognise the importance of intentions, research, experimentation and innovation within their ceramic practice
- develop and refine the conceptual and material aspects of their practice through the exercise of critical reflection and judgment
- investigate the design, function and packing of kilns and the visual qualities of works fired in any of the following:
  - sawdust/pit-fired kilns (pre-bisqued, low-fired, slow combustion, packing) and the encouragement of flashings in the placement of pots and manipulated by different fuels, salts and oxides
  - raku kilns (pre-bisqued, rapid glaze firing) and the manipulation of a base glaze with oxides, reduction in different mediums such as leaves, saw-dust, dried seaweed and quenching in water to promote crazing and the incidental spontaneous effects
  - electric kilns (most common in schools, packing, control of bisque firing, packing glaze firing, oxidised firing) and the limited but predictable visual effects achieved
  - gas kilns (safety issues, controls and connections, constant monitoring of kiln atmosphere and temperatures, packing, oxidised or reduction firings) and the range of effects achieved through reduction firing such as celadon, temmoku and red copper effects
  - kilns utilising other fuels such as wood and oil
- investigate kiln ventilation (up-draft, down-draft, kiln and flue dampers)
- experiment with kiln controls (cones, pyrometers, energy regulators and gas regulators)
- investigate the use of kiln insulation materials (fire-bricks, ceramic fibre blanket (kaowool), hardface compressed ceramic fibreboard)
- investigate kiln health and safety issues, for example, identification and elimination or reduction of hazards presented by electricity, gas, heat, radiation, lack of ventilation, hot fumes, or gases and dust from insulation materials
- use one or more of the Frames to focus investigations in making, critical study and historical study of ceramics. For example:
  - **Structural**: the selection and manipulation of firings in different types of kilns in order to exploit the expressive potential of materials
  - **Subjective**: the selection of different firing techniques to produce works that further their own personal aesthetic investigations – eg the use of raku techniques, sawdust firings, etc
- **Cultural**: the investigation into the influence of kiln technologies from different cultures and times and their impact on form and decoration — eg Papua New Guinea pit-firing, Japanese raku ware, Chinese and celadon glaze ware — and how these may be selectively employed in their own work
- **Postmodern**: the re-investigation and re-interpretation by contemporary artists/ceramists of different firings that have fallen into commercial disuse with consideration of why the techniques are no longer used — eg changing technologies and political relationships, change of trading patterns, depletion of raw materials, etc.
### 8.7 Module 7

<table>
<thead>
<tr>
<th>Title</th>
<th>Glaze Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicative Hours</td>
<td>20–40</td>
</tr>
</tbody>
</table>

**Course Outcomes:** M1, M2, M3, M4, M5, M6, CH1, CH2, CH3, CH4, CH5

**Module Description:**
This module provides students with an understanding of the nature and composition of glazes, underglazes and onglaze decoration. It also provides students with the opportunity to manipulate glaze techniques to produce conceptually strong and highly resolved works using oxides and other raw materials.

**Content**

In this module students learn to:
- recognise the importance of intentions, research, experimentation and innovation within their ceramic practice
- develop and refine the conceptual and material aspects of their practice through the exercise of critical reflection and judgment
- explore the nature and function of glaze on ceramic forms (decoration and hygiene)
- investigate the basic composition of glaze — glass formers (silica), fluxes, glass stiffeners (alumina), colourants (stains and oxides) and opacifiers
- manipulate base glaze by empirical experimentation with oxides and other raw materials to manipulate colour and surface
- investigate the geological and mineral sources of raw materials
- explore glaze techniques such as underglaze, onglaze, dipping, pouring, spraying, brushing, wax resist, lustre
- investigate glaze faults such as crawling, pinholing, crazing, sintering and bubbling
- experiment with firing schedules and temperatures for various glazes
- understand the potential hazards of glazes and glaze materials and measures to reduce or eliminate risks posed by dust and toxicity
- use one or more of the Frames to focus investigations in making and the critical study and historical study of ceramics. For example:
  - **Structural:** conventions such as the relationship of glaze to form — selective placement, contrast of surfaces and "wet" and "dry" effects
  - **Subjective:** approaches to the use of different glaze materials to create evocative surfaces that convey particular feelings
  - **Cultural:** traditions and associations in the use of glaze made by different cultures
  - **Postmodern:** the use of glaze by ceramists and the exploration and manipulation of layered surfaces through multiple firings, challenging more traditional practices. The re-evaluation of obsolete materials such as barium and lithium glazes.
8.8 Module 8

**Module Title**
Casting

**Indicative Hours**
20–40

**Course Outcomes**
M1, M2, M3, M4, M5, M6, CH1, CH2, CH3, CH4, CH5

**Module Description**
This module provides students with the opportunity to explore casting methods and techniques to create multiples of a form. Students will develop understanding about how ceramic forms are produced from different casts and also to create their own plaster casts. Students will engage in the study of casting methods, in order to create tableware, functional and non-functional forms, from various cultures and times, to inform their practice.

**Content**

In this module students learn to:

- recognise the importance of intentions, research, experimentation and innovation within their ceramic practice
- develop and refine the conceptual and material aspects of their practice through the exercise of critical reflection and judgment
- use plaster moulds such as press moulds (for platters, bowls, containers and other forms), hump moulds (for platters with unusual foot formations, large bowls with outside decorations and handles, etc) and slip casting moulds (for bottles, box forms, cups and other wares)
- use non-plaster moulds (eg cardboard, rubber and plastic moulds)
- use moulds to create multiples of a form
- combine two or more casting techniques
- use different clay bodies such as liquid clay (slip) to make casts and forms, and the time requirements involved in the processes
- manipulate, cut, join, rearrange, fettle and finish cast objects to create new forms
- create their own plaster mould from a simple clay made form or selected rubber or plastic object
- make judgements about drying and firming times in the creation of their own mould
- identify problems associated with drying times, shrinkage and cracking of mould forms
- identify mould-created pieces
- explore surface treatments which can be used in plaster moulds such as:
  - carving designs directly into the plaster surface
  - use of small coils and bits of clay in decorative ways in building up forms in moulds
  - marbling, pouring, painting and slip trailing into the moulds
  - using textured clay and coloured clay bodies in the moulds
  - sprigging, joining a foot, handles or small sculptural forms
- work with consideration of health and safety in casting, finishing, sanding and using slip cast forms
- identify different potential audiences and consumers for the works they produce and how the works would be used
- use one or more of the Frames to focus investigations in making and the critical and historical study of ceramics. For example:
  - **Structural**: the elements and conventions used in tableware such as shape, colour and surface in relation to function and use of the object by selected ceramists and cultures and how these findings may inform the students’ own work
- **Subjective:** the approaches used in casting to create unique forms and express individuality and personal association (such as in the work of Jenny Orchard) and how notions of the unique and individual are taken up in their own work.
- **Cultural:** ways in which contemporary ceramists innovate within and extend traditions and conventions with the use of various casting methods.
- **Postmodern:** use of classical motifs and classical forms that play on historical references and recontextualise these in provocative ways.
8.9 Module 9

**Module Title**

**Surface Treatment**

**Indicative Hours**

20–40

**Course Outcomes**

M1, M2, M3, M4, M5, M6, CH1, CH2, CH3, CH4, CH5

**Module Description**

This module provides students with an insight into the expressive nature of clay surfaces and its manipulation by treatments during the cycle of raw clay to fired form. These techniques underpin and complement the module on glaze technology. Students will also engage in the critical and historical study of the conventions of ceramic surface treatments from various cultures and ceramists to inform their ceramics practice.

**Content**

In this module students learn to:

- recognise the importance of intentions, research, experimentation and innovation within their ceramic practice
- develop and refine the conceptual and material aspects of their practice through the exercise of critical reflection and judgment
- use a range of surface treatments and utilize them on selected forms that emphasise visual or tactile qualities. These may include:
  - stretched clay (slabs thrown obliquely over a surface of ball clay)
  - incising and sgraffito (carving designs into raw clay or slip-coated clay and highlighting with oxides)
  - inlay (application of coloured slips or clays into deeply incised or impressed surface designs, then sanding or scraping back)
  - impressing (rolling or burnishing into the surface with materials such as netting, lace, found woven materials (cloth, wire, fabric, sacking), leaves, coarse sawdust or other combustible materials that will leave negative spaces once fired)
  - combing (into a raw clay surface and then highlighting with oxides or through slip coated clay)
  - scraping (of highly grogged-clay bodies to produce an open pored surface using such tools as hack-saw blades, surform blades, serrated knives)
  - stamping (the use of manufactured or found objects to create surface pattern and texture, which could be further highlighted with slips and oxides)
  - impasto slip (the sponging or dabbing by brush of very thick slip onto a form creating a surface evocative of weathering)
  - oxides (the highlighting of textures by a contrasting wash of oxides)
  - slips and engobes (brushed on or applied with a slip trailer to build up layered surfaces)
  - marbling (the use of different coloured slips on a surface combed or feathered to exploit expressive potential)
  - multiple firings to combine any of the above.
- use one or more of the Frames to focus investigations in making and the critical and historical study of ceramics. For example:
  - **Structural**: conventions associated with surface treatments and their applications on different forms; how symbols develop in their relation and meaning to the particular surface treatments – eg engobes, or the use of gold
- **Subjective**: the exploitation and meaning of surface treatments used to create imaginative responses on ceramic forms
- **Cultural**: the investigation of different surface treatments as reflections of different cultures; for example, the graphic linear incising of ancient Greek wares compared to the exploitation of materials in an abstract and expressionist manner in the mid to late twentieth century in Europe, USA, Japan and Australia
- **Postmodern**: approaches that reinvent surface treatments by combining, juxtaposing and reworking methods from other cultures.
### Module 10

**Module Title**
Mixed Media

**Indicative Hours**
20–40

**Course Outcomes**
M1, M2, M3, M4, M5, M6, CH1, CH2, CH3, CH4, CH5

**Module Description**
This module provides students with the opportunity to explore various media, such as metal, plastics, fibre, timber, paper and other selected materials, in combination with clay and its properties. Students will develop understandings of how forms and objects can be created that emphasise technical and conceptual aspects. This module extends and complements the knowledge and skills which underpin the module on Sculpture. Students will engage in the critical and historical study of ceramic sculptors and traditions to inform their practice.

**Content**

In this module students learn to:

- recognise the importance of intentions, research, experimentation and innovation within their ceramic practice
- develop and refine the conceptual and material aspects of their practice through the exercise of critical reflection and judgment
- explore structural and joining problems associated with making works using combined techniques and different media
- explore surface treatments and the visual and tactile quality of materials in combination
- investigate using ceramic techniques in combination — eg combining handbuilt and thrown forms
- investigate various joining materials with clay such as metal, wire, perspex, glass, fabric, timber, board, paper and other commercial, natural or found materials or objects
- explore the relationship between size, form, space, structure, texture, mass and void
- explore the purpose of the work, the audience and where it will be viewed
- explore the notion of practice of the ceramist in their critical and historical studies and in their own practice
- use one or more of the Frames to focus investigations in making and the critical and historical study of ceramics. For example:
  - **Structural**: the availability of traditional and new materials and how these have influenced work produced; the incorporation and use of design elements and principles in various works
  - **Subjective**: the use of materials, forms and images to evoke feelings and convey personal meaning
  - **Cultural**: the purpose of selected forms in cultural contexts; the traditions and conventions used in construction methods and conceptual ideas
  - **Postmodern**: the use of found objects and materials in contemporary forms; the use of appropriation and reworking of traditional forms in new work.
8.11 Module 11

<table>
<thead>
<tr>
<th>Module Title</th>
<th>Ceramics Project</th>
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<tbody>
<tr>
<td>Indicative Hours</td>
<td>20–40</td>
</tr>
<tr>
<td>Course Outcomes</td>
<td>M1, M2, M3, M4, M5, M6, CH1, CH2, CH3, CH4, CH5</td>
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Module Description

This module provides students with the opportunity to design their own ceramics project, in consultation with their teacher, and extends the learning undertaken in previous modules. The students’ work may encompass more than one area of ceramics; for example, the work might combine throwing and hand-building techniques. It should entail both research and practice and related critical and historical studies.

Content

In this module students learn to:

- recognise the importance of intentions, research, experimentation and innovation within their ceramic practice
- develop and refine the conceptual and material aspects of their practice through the exercise of critical reflection and judgment
- make ceramic works such as:
  - utilitarian ceramic works combining techniques such as throwing and hand-building
  - monumental works with a focus on sculptural forms
  - works that have been cast from a variety of moulds and mould techniques
  - works combining different glaze technologies and kiln techniques
- imaginative works that explore a collective response to an environment
- explore the traditions and conventions of a particular cultural group and seek to make works that employ these – eg Archaic red and black styles
- investigate the practice of a master potter (eg Bernard Leach) and seek to use his approaches in developing a series of works
- use the frames to orientate their investigations in making critical and historical studies
9 Course requirements

Student diary and portfolio of work

Students are required to keep a diary over the duration of the course. The diary may include a sketch book, folder, boxes and containers, photographs etc. The diary can indicate various aspects of the learning that has occurred within the modules. The diary, in conjunction with other work produced, should be used within the assessment program developed by the school.

Students should document the technical aspects of their work and should note the development of concepts and ideas, points of departure and changes in direction in their diaries. The diary should provide some evidence of the critical reflection and the exercise of judgement undertaken by students in ceramics.

The diary provides a useful point for discussion and negotiation between teachers and students about students’ developing understanding of practice in ceramics. The diary, in relation to the ceramics works produced, provides the opportunity for the exchange of views about ideas and concepts, techniques, interpretation and meaning of work produced.

Students are encouraged to develop a portfolio of their work over the course. The portfolio could contain works which are accomplished, conceptually strong and well-resolved and that demonstrate students learning in the selected modules.

Exclusions:

When selecting modules from the Ceramics Content Endorsed Course, duplication with other Stage 6 syllabuses that students are studying should be avoided.

In addition there may be specific exclusions that apply to students of this course. Reference should be made to the appropriate section of the Assessment Certification and Examination (ACE) Manual to identify the current list of exclusions.
10 Post-school Opportunities

The study of Ceramics Stage 6 provides students with knowledge, understanding and skills that form a valuable foundation for a range of courses at university and other tertiary institutions.

In addition, the study of Ceramics Stage 6 assists students to prepare for employment and full and active participation as citizens. In particular, there are opportunities for students to gain recognition in vocational education and training. Teachers and students should be aware of these opportunities.

Recognition of Student Achievement in Vocational Education and Training (VET)

Wherever appropriate, the skills and knowledge acquired by students in their study of HSC courses should be recognised by industry and training organisations. Recognition of student achievement means that students who have satisfactorily completed HSC courses will not be required to repeat their learning in courses in TAFE NSW or other Registered Training Organisations (RTOs).

RTOs, such as TAFE NSW, provide industry training and issue qualifications within the Australian Qualifications Framework (AQF).

The degree of recognition available to students in each subject is based on the similarity of outcomes between HSC courses and industry training packages endorsed within the AQF. Training packages are documents that link an industry’s competency standards to AQF qualifications. More information about industry training packages can be found on the National Training Information Service (NTIS) website (www.ntis.gov.au).

Recognition by TAFE NSW

TAFE NSW conducts courses in a wide range of industry areas, as outlined each year in the TAFE NSW Handbook. Under current arrangements, the recognition available to students of Ceramics Stage 6 in relevant courses conducted by TAFE is described in the HSC / TAFE Credit Transfer Guide. This guide is produced by the Board of Studies and TAFE NSW and is distributed annually to all schools and colleges. Teachers should refer to this guide and be aware of the recognition available to their students through the study of Ceramics Stage 6. This information can be found on the TAFE NSW website (www.det.nsw.edu.au/hsctafe).

Recognition by other Registered Training Organisations

Students may also negotiate recognition into a training package qualification with another Registered Training Organisation. Each student will need to provide the RTO with evidence of satisfactory achievement in Ceramics Stage 6 so that the degree of recognition available can be determined.
11 Assessment of Stage 6 Content Endorsed Courses

11.1 Requirements and Advice

The information in this section of the syllabus relates to the Board of Studies’ requirements for assessing student achievement in the Content Endorsed Courses for the Higher School Certificate.

Assessment is the process of gathering information and making judgements about student achievement for a variety of purposes. Those purposes include:
- assisting student learning
- evaluating and improving teaching and learning programs
- providing evidence of satisfactory achievement and completion in the Preliminary course
- providing the Higher School Certificate results.

11.2 Assessment of Stage 6 Content Endorsed Courses

There is no external examination of students in Stage 6 Content Endorsed Courses. Assessment provides a measure of a student’s achievement based on the range of syllabus content and outcomes. The assessment components, weightings and task requirements to be applied to internal assessment are identified on page 31. They ensure a common focus across schools for internal assessment in the course, while allowing for flexibility in the design of tasks. A variety of tasks should be used to give students the opportunity to demonstrate outcomes in different ways and to improve the validity and reliability of the assessment.

Schools should develop an assessment program that:
- specifies the various assessment tasks and the weightings allocated to each task
- provides a schedule of the tasks designed for the whole course.

The school should also develop and implement procedures to:
- inform students in writing of the assessment requirements for each course before the commencement of the HSC course
- ensure that students are given adequate written notice of the nature and timing of assessment tasks
- provide meaningful feedback on each student’s performance in all assessment tasks
- maintain records of marks awarded to each student for all assessment tasks
- address issues relating to illness, misadventure and malpractice in assessment tasks
- address issues relating to late submission and non-completion of assessment tasks
- advise students in writing if they are not meeting the assessment requirements in a course and indicate what is necessary to enable the students to satisfy the requirements
- inform students about their entitlements to school reviews and appeals to the Board
- conduct school reviews of assessments when requested by students
11.3 Assessment Components, Weightings and Tasks

The components and weightings to be used by schools are detailed below. The allocation of weighting to particular tasks is left to the individual schools, but the percentage allotted to each assessment component must be maintained. There should be a balance between the assessment of:

- knowledge and understanding outcomes and course content and
- skills outcomes and content.

The following components and weightings are to apply:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weighting (%)</th>
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</thead>
<tbody>
<tr>
<td>Making</td>
<td>70%</td>
</tr>
<tr>
<td>Critical Study/Historical Study</td>
<td>30%</td>
</tr>
</tbody>
</table>

One task may be used to assess several components. It is suggested that two to three tasks are sufficient to assess the HSC course outcomes for a one-unit course and three to five tasks are sufficient to assess the HSC course outcomes for a two-unit course.

The assessment tasks given to students must:

- be consistent with the objectives and outcomes being assessed
- provide for a range of performances and achievements within the group
- be consistent in number with comparable 1 or 2 unit Board-developed courses
- use a range of assessment instruments. Each instrument must be appropriate to the outcomes it is designed to measure.

Other requirements include:

- at least one assessment task derived from formal examinations which includes both making and critical/historical studies. Formal examinations are defined as any form of examination as used in the Higher School Certificate under conditions similar to those used in the HSC for comparable tasks and which apply equally to all students at the school
- reference to work undertaken in the diary as part of the assessment process.

Strategies and instruments and used for assessment purposes may include the following:

- experiments with joining different clay bodies and other materials
- maquettes of sculptured works
- ceramic works in progress
- evidence of critical and historical investigations
- research assignments
- critical reviews of their own and others’ works
- experiments with clay types, glazes, underglazes, etc kept as test tiles
- oral reports
- exhibitions of works
- completed works – eg hand-built, thrown and cast works
- reviews of exhibitions
- sketches, notes, plans, diagrams, photographs, annotations and other research documented in the student diary and/or portfolio of work.