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Arts Domain

For further information about subjects in the Arts Domain, please contact the Domain Leader:

Mr. Kim Morrison  morrison.kim.d@edumail.vic.gov.au

Subjects offered within the Arts Domain in the VCE area include:

- Art
- Drama
- Music
- Studio Arts
- Visual Communication and Design

Other subjects which may be useful to students with an interest in the Art area include a range of VET subjects:

- VET Music Technical Production

Some Career Paths ideas which may be of use

- Actor
- Photographer
- Film / TV editor
- Costume designer
- Primary / Secondary Teacher
- Lighting Technician
- Make up Person
- Dance Teachers
- Musician
- Graphic designer
- Photographer
- Camera Operator
- Band member
- Events Manager
- Sound Engineer
Art

Subject Code: ART

Previous Years Materials & Resources Costs – guide only

Unit 1 & 2  $97.00
Unit 3 & 4  $107.00

Unit 1

Art and Meaning – Art Appreciation

Art Making and Personal Meaning – Art Production
This unit encourages the imaginative exploration of materials, techniques and working methods, demonstrating visual solutions to set tasks and studying the ways in which the art of past and present relates to the society for which it was created. You will discuss the social functions of art identifying themes and issues.

The focus in this unit is on visual solutions developed through an exploration of techniques, materials, skills, working methods and concepts with a focus on selected media and art forms, exploring techniques through inter-media and cross-media investigations.

Unit 2

Art and Culture – Art Appreciation

Artmaking and Cultural expression – Art Production
This unit focuses on the development of art works demonstrating effective working methods and studying the roles of artists and their innovative and personal involvement in art. You will study the role of artists in different societies.

Art production will involve the visual exploration and development of artworks from the students’ conceptual and/or imaginative starting points incorporating inter-media and cross-media investigations. The areas of interest selected by the student become the unit task.

Unit 3

Investigation and Interpretation

This area of study will include the development of effective visual language development that leads to an innovative investigation of work that includes exploring and experimenting in one or more media. The unit will involve developing a sustained body of work.
Interpreting Art

The Arts Appreciation unit introduces the critical framework used to interpret art. Students are required to respond critically to art and to reflect on ideas and issues raised. You will study two periods of art: post and pre 1970, with at least two artists within the selected periods.

Unit 4

Realisation and resolution

Development of an innovative body of work which contains inter-media and/or cross-media, media exploration of ideas and techniques. The final assessment will be on the progressive resolution of the student’s ideas as presented in the body of work as a whole.

Discussing and debating Art – Art Appreciation

Focus of this unit will explore the meanings and messages of art through interpretation of selected art works with reference to commentaries on art. It will include a study of one period of art and at least two artists who have produced work within the period (these may be the same artists). The study will include the ways commentaries on art express ideas, issues and argument to develop critical points of view.

Drama

Subject Code:  DRA

Previous Years  Materials & Resources Costs – guide only

Unit 1 & 2  $305.00 (includes practical activities and trips

Unit 3 & 4  $305.00 (includes practical activities and trips

School Based Assessment (Units 3 and 4) = 40

% Solo Performance (External ) = 35 %

Written Exam (External) = 25%

Unit 1

Dramatic Storytelling

This unit focuses on creating, presenting and analysing a devised performance that includes real or imagined characters, based on personal, cultural and/or community experiences and stories.

Students examine storytelling through the creation of an ensemble performance/s and manipulate expressive skills in the creation and presentation of characters. They develop an awareness and understanding of how characters are portrayed in naturalistic and non-naturalistic performance style/s. Students also gain an awareness of how performance is shaped and given meaning. They investigate a range of stimulus material and learn about stagecraft, theatrical conventions and performance styles from a range of social and cultural contexts.
This unit also involves analysis of a student’s own performance work and analysis of a performance by professional and other drama practitioners.

Creating Australian Drama

This unit focuses on the use and documentation of the processes involved in constructing a devised solo performance. Students create, present and analyse a performance based on a person, an event, an issue, a place, an art work, a text and/or an icon from a contemporary or historical Australian context.

Students use a range of stimulus material in creating performance and examine performance styles from a range of cultural and historical contexts. Theatrical conventions appropriate to the selected performance styles are also explored. Students knowledge of how dramatic elements are enhanced or manipulated through performance is further developed in this unit.

Unit 3

Ensemble Performance

The focus of this unit is on non-naturalistic drama. Students collaborate in the development of an ensemble performance, drawing on subject matter from a range of sources and using non-naturalistic styles from a range of traditions. Analysis and evaluation is focused on the development and realisation of the student’s own character(s) in the ensemble, the development and presentation of the ensemble performance and also on a non-naturalistic performance from a prescribed play list.

Unit 4

Solo Performance

A solo performance based on a prescribed structure is developed, scripted and performed (external exam) by each student. They will also analyse and evaluate the processes involved in the preparation and realisation of their own solo work. There will be a written exam (external) at the end of the year, which includes aspects of both Units 3 and 4 work.
Music

Subject Code: MUS

Previous Years Materials & Resources Costs – guide only

Unit 1 & 2 $20.50
Unit 3 & 4 $20.50

School Based Assessment (Units 3 & 4) = 30%
Solo Performance (External ) = 50%
Written Exam (External) = 20%

Unit 1 and 2

Music Performance

This unit focuses on building performance and musician skills. Students present performances of selected groups and solo music works using one or more instruments. They study the work of other performers and explore strategies to optimize their own approach to performance. They identify technical, expressive and stylistic challenges relevant to works they are preparing for performance and practice technical work to address these challenges. They also develop skills in performing previously unseen music. Students study aural, theory and analysis concepts to develop their musicianship skills and apply this knowledge when preparing and presenting performances. They develop skills in performing previously unseen music and study specific concepts to build their musicianship knowledge and skills. Students also devise an original composition or improvisation.

Unit 3 and 4

Music Performance (Solo/ Group)

This unit prepares students to present convincing performances of group and solo works. In this unit students select a program of group and solo works representing a range of styles and diversity of character for performance. They develop instrumental techniques that enable them to interpret the works and expressively shape their performances. They also develop an understanding of performance conventions they can use to enhance their performances. Students continue to develop skills in aural perception and comprehension, transcription, theory, analysis and unprepared performance. Students continue to study ways in which Australian performers interpret works that have been created since 1910 by Australian composers / songwriters.
Studio Arts

Subject Code: SAR

- Previous Years Materials & Resources Costs – guide only
  - Unit 1 & 2 $176.50
  - Unit 3 & 4 $180.50

Unit 1

Artistic Inspiration and techniques
The focus of this unit is the investigation of sources of inspiration, which generate creative activity and the exploration of a wide range of materials and techniques as tools for translating ideas, observations and experiences into visual form. The application of materials and techniques and interpretation of sources of inspiration by artists from different times and cultures is also examined.

Unit 2

Design Exploration and Concepts
The focus of this unit is to establish an effective design methodology for the production of art works and develop skills in the analysis of art works.

Unit 3

Studio Production and Professional art practices
The focus of this unit is the implementation of the design process leading to the production of a range of potential directions proposed in the exploration proposal solutions. Students also examine traditional and contemporary practices of artists together with the ways in which artists develop distinctive styles and approaches to subject matter.

Unit 4

Studio Production and Industry contexts
The focus of this unit is to produce a cohesive folio of finished art works which resolves the aims and intentions set out in the exploration proposal formulated in Unit 3. Students also examine different components of the arts industry and issues relating to the public display, promotion and critique of art works.
Visual Communication Design

Subject Code: VIS

Previous Years Materials & Resources Costs – guide only

Unit 1 & 2 $76.50
Unit 3 & 4 $85.50

Visual Communication Design welcomes a new and exciting study design for 2013! Visual Communication Design can inform people’s decisions about where and how they live and what they buy and consume. The study provides students with the opportunity to develop an informed, a critical and a discriminating approach to understanding and using visual communications, and nurtures their ability to think creatively about design solutions.

The study of Visual Communication Design can provide pathways to training and tertiary study in design and design-related studies, including graphic design, industrial and architectural design and communication design.

Unit 1

Introduction to visual communication design

This unit focuses on using visual language to communicate messages, ideas and concepts. Students will practise their ability to draw from observation and use visualisation drawing methods to explore their own ideas. Students will also develop an understanding of the importance of presentation drawings to clearly communicate their final visual communications. Through both theoretical and practical exercises students will develop an understanding of how design elements and principles affect the visual message and the way information and ideas are read and perceived. Students will also research and review the contextual background of visual communication through an investigation of design styles.

Unit 2

Applications of visual communication design

This unit focuses on the application of visual communication design knowledge, design thinking skills and drawing methods to create visual communications to meet specific purposes in designated design fields. Students will use presentation drawing methods that incorporate the use of technical drawing conventions to communicate ideas and information. They will also investigate how typography and imagery are used in visual communication design. Students will also develop an understanding of the design process, engaging in the stages of research, generation of ideas and development of concepts to create visual communications.
Unit 3:

Design thinking and practice

The focus of this unit is for students to gain an understanding of the process that designers use to communicate ideas with clients, target audiences, other designers and specialists. Students will investigate and analyse existing visual communications, along with the investigation and experimentation of manual and digital methods, media and materials. Students will establish a design brief, identifying and describing one client, two distinctly different needs of that client, and the purpose, target audience, context and constraints relevant to each need. Students will then engage in the stages of research and generation of ideas. The brief and investigation work will underpin the developmental and refinement work to be undertaken in Unit 4.

Unit 4

Design development and presentation

The focus of this unit is the development of the design concepts and two final presentations of visual communications to meet the requirements of the brief established in Unit 3. This involves students applying the design process twice to meet each of the stated needs. Students will utilise a range of digital and manual methods, media and materials, considering how the application of design elements and principles created different communication messages to their target audience. Students will evaluate their visual communications and devise a pitch to communicate their design thinking and decision making to the client.
English

For further information about subjects in the English Domain, please contact the Domain Leader:

Ms Lyn Eeles eeles.lynn.r@edumail.vic.gov.au

English

Subject Code: ENG

Previous Years Materials & Resources Costs – guide only

Unit 1 & 2 $29.00

Unit 3 & 4 $32.50

Unit 1

English provides students with the opportunity to explore how meaning is created in a text. They will identify, discuss and analyse the decisions authors have made, exploring how authors use language to represent characters, settings, events, explore themes and build the world of the text for the reader. Students respond to texts analytically and creatively. They use planning and drafting to test and clarify their ideas, and editing for clear and coherent expression. Students focus on the analysis and construction of texts that attempt to influence an audience. They explore the use of language for persuasive effect and the structure and presentation of argument, considering different types of persuasive language, including written, spoken, and visual, and combinations of these, and how language is used to position the reader. In considering the presentation of arguments in oral form, students also learn about the conventions of oral communication for persuasive purposes, crafting and presenting reasoned, structured and supported arguments and experimenting with the use of language to position audiences.

Unit 2

In this unit students compare the presentation of ideas, issues and themes in texts. Students explore how comparing texts can provide a deeper understanding of ideas, issues and themes. They investigate how the reader’s understanding of one text is broadened and deepened when considered in relation to another text. Students produce a written comparison of selected texts, discussing important similarities and differences, and exploring how the texts deal with similar or related ideas, issues or themes from different perspectives. They draft, revise, edit and refine for technical accuracy, and for clear, coherent and effective presentation of the insights gained through comparison. Students identify and analyse how arguments and persuasive language are used in text/s that attempt to influence an audience, and create their own texts which present a point of view.
Unit 3

In this unit students read and respond to texts analytically and creatively. Students identify, discuss and analyse how the features of selected texts create meaning and how they influence interpretation. Students respond to texts with justified interpretations. They also present sustained creative responses to selected texts, demonstrating their understanding of the world of the texts and how texts construct meaning. In developing a creative response they explore issues of purpose and audience and make key choices about structure, conventions and language. They produce and share drafts, practising the skills of revision, editing and refining for stylistic and imaginative effect.

Students analyse and compare the use of argument and language in texts that debate a topical issue. Considering information about the purpose, audience and context of a text, students explore the argument of a persuasive piece, and the way written, spoken and visual language is used. They develop written and spoken critical analyses of the use of argument and language in written, spoken, and/or multimodal texts.

Unit 4

In this unit students compare the presentation of ideas, issues and themes in texts. Students produce a written analysis comparing selected texts, discussing important similarities and differences and exploring how the texts deal with similar or related ideas, issues or themes from different perspectives to reflect particular values.

They also use their knowledge of argument and persuasive language as a basis for the development of their own persuasive texts in relation to a topical issue that has appeared in the media. Students use discussion and writing to clarify their thinking and develop a viewpoint on an issue, to plan and prepare an argument and its supporting evidence, and to develop and prepare any materials to support an oral presentation.
English Language

Subject Code: ENL

Previous Years Materials & Resources Costs – guide only

Unit 1 & 2 $32.50

Unit 3 & 4 $32.50

Unit 1

Language and communication

The use of language is an essential aspect of human behaviour, the means by which individuals relate to the world, to each other and to the community of which they are members. This unit focuses on the nature and functions of language as an elaborate system of signs. Students explore the relationship between speech and writing and the impact of situational and cultural contexts on language choice. Students also investigate the acquisition of language in children, including the stages of, and theories for, language acquisition.

Unit 2

Language change

Languages are dynamic and change is inevitable and a continual process. This unit studies the history of the English language and its evolution from Indo-European languages to Modern English. Students consider factors contributing to language change over time and the changes to subsystems, including phonetics and semantics, as a result. Particular attention is paid to attitudes towards language change and efforts to preserve indigenous languages. Students also explore the effects of globalisation on English and other languages and the impact of the spread of English on cultural diversity.

Unit 3

Language Variation and Social Purpose

Through language we communicate information, ideas, attitudes, prejudices and ideological stances. Language varies according to both the user and the occasion of use. Using Australia as context, this unit investigates language as a means of societal interaction. Features of formal and informal language, both spoken and written, are considered and students analyse the interrelationship between parts of text and the understanding of message and meaning. Students also investigate the ways in which language can be used in processes of inclusion and exclusion, and the influence of situational and cultural contexts on language choice.
Unit 4

Language Variation and Identity

Language plays a significant role in establishing and challenging identity. In this unit, students examine the ways in which Australian identities are constructed through language use. Students explore the various varieties of English in use in modern Australia, including national, regional, cultural and social variations. Students also investigate the way in which a sense of self evolves and responds to situation and the way in which language is crucial in establishing identity and can be used to reinforce social distance and/or solidarity.

VCAL Literacy

Subject Code: EVC

Previous Years Materials & Resources Costs – guide only

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<th>Units</th>
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<td>Unit 1 &amp; 2</td>
<td>$27.50</td>
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<td>Unit 3 &amp; 4</td>
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The minimum VCE English requirement is three units from the English group, with at least one at Units 3 and 4 level. There are both Year 11 and Year 12 VCAL units, however if a student wishes to change to a VCE English pathway, they must complete one English unit in Year 11 and then a 3 and 4 sequence. English units may be selected from Foundation English Units 1 and 2, English Units 1 to 4, EAL Units 3 and 4, English Language Units 1 to 4, and Literature Units 1 to 4.

Students enrolling in Foundation VCAL may take 3 years to complete the required unit.

VCAL Literacy Skills – Foundation Reading and Writing Unit and Oracy Unit

VCAL Literacy Skills – Intermediate Reading and Writing Unit and Oracy Unit

VCAL Literacy Skills – Senior Reading and Writing Unit and Oracy Unit

VCAL Literacy is designed to enable the development of skills, knowledge and attitudes in literacy that allow progression in the main social contexts of family, employment, further learning and citizenship.

Reading & Writing

Competence must be shown in all 8 learning outcomes.

1. **Write for Self Expression**
   Write a recount, narrative or expressive text.

2. **Writing for Practical Purposes**
   Write an instructional or transactional text

3. **Writing for Knowledge**
   Write a report or explanatory text.
4. **Writing for Public Debate**
   A short persuasive text expressing a point of view on a familiar subject.

5. **Reading for Self Expression**
   Demonstrate that meaning has been gained from reading a narrative, recount or expressive text.

6. **Reading for Practical Purposes**
   Demonstrate that meaning has been gained from reading an instructional or transactional text.

7. **Reading for Knowledge**
   Demonstrate that meaning has been gained from reading an explanatory or informative text.

8. **Reading for Public Debate**
   Demonstrate that meaning has been gained from reading a persuasive or argumentative text

**VCAL Literacy Skills**

**Oral Communication**

Competence must be shown in all 4 learning outcomes.

1. **Oracy for Self Expression**
   Use and respond to spoken language to explore others’ stories and life experience.

2. **Oracy for Knowledge**
   Use and respond to spoken language in talks or discussions

3. **Oracy for Practical Purposes**
   Use and respond to spoken language in familiar contexts.

4. **Oracy for Exploring Issues and Problem Solving**
   Use and respond to spoken language in discussions to explore issues or to solve problems.
Literature

Subject Code: LIT

Previous Years Materials & Resources Costs – guide only

Unit 1 & 2 $33.50
Unit 3 & 4 $33.50

Unit 1
The study of Literature focuses on the enjoyment and appreciation of reading that arises from discussion, debate and the challenge of exploring the meanings of literary texts. Students reflect on their interpretations and those of others. The study encompasses texts that vary in form and range from past to contemporary social and cultural contexts. Students learn to understand that texts are constructions, to consider the complexity of language and to recognise the influence of contexts and form. The study of literature encourages independent and critical thinking in students’ analytical and creative responses to texts.

Unit 2
The study of Literature focuses on the enjoyment and appreciation of reading that arises from discussion, debate and the challenge of exploring the meanings of literary texts. Students look at how meaning is derived from the relationship between the text, the context in which it was produced and the experience of life and literature the reader brings to the texts. The study encompasses texts that vary in form and range from past to contemporary social and cultural contexts. Students learn to understand that texts are constructions, to consider the complexity of language and to recognise the influence of contexts and form. This study will develop students’ analytical and creative responses to texts, with greater independent and critical thinking.

Unit 3
The study of Literature focuses on the enjoyment and appreciation of reading that arises from discussion, debate and the challenge of exploring the meanings of literary texts. Students reflect on their interpretations and those of others. The study encompasses texts that vary in form and range from past to contemporary social and cultural contexts. Students learn to understand that texts are constructions, to consider the complexity of language and to recognise the influence of contexts and form. The study of literature encourages independent and critical thinking in students’ analytical and creative responses to texts.

Unit 4
The study of Literature focuses on the enjoyment and appreciation of reading that arises from discussion, debate and the challenge of exploring the meanings of literary texts. Students look at how meaning is derived from the relationship between the text, the context in which it was produced and the experience of
life and literature the reader brings to the texts. The study encompasses texts that vary in form and range from past to contemporary social and cultural contexts. Students learn to understand that texts are constructions, to consider the complexity of language and to recognise the influence of contexts and form. This study will develop students’ analytical and creative responses to texts, with greater independent and critical thinking.
Health and Physical Education Domain

For further information about subjects in the Health and Physical Education Domain, please contact the Domain Leader: Miss Melissa Clark clark.melissa.m@edumail.vic.gov.au

Subjects offered within the Health and Physical Education Domain in the VCE area includes:

- Health and Human Development
- Physical Education
- Outdoor Education

Health and Human Development

Subject Code: HHD

Previous Years Materials & Resources Costs – guide only

Unit 1 & 2 $60.00
Unit 3 & 4 $62.00

The study of Health and Human Development is based on the premise that health is a dynamic condition that is influenced by complex interrelationships between individuals and biomedical and behavioural factors, as well as physical and social environments. Health and human development needs to be promoted at an individual level, and within group and community settings at national and international levels, to maximize global development potential.

The VCE Human Development study approaches the concept of ‘development’ as a continuum that begins with individual human development in Units 1 & 2, and progresses towards human development at a societal level in Unit 4.

The study also promotes the understanding that nutrition plays a major role in influencing both health status and individual human development.

Assessment

Assessment across the four units of study includes a combination of the following tasks:

- Case study analysis
- Data analysis
- Multimedia presentation
- Oral presentation
- Test
Career Pathways
Health Promotion Officer, Health Education, Community Health Officer, Family and Community Support, Health Marketing, Health and Sport Public Relations, Health Policy Development, Nutritionist, Social Worker, Nursing, Teaching, Health Psychologist, Mental Health Nurse, Health Surveyor, Child care, Welfare, Drug and Alcohol Counsellor, Youth Worker

Unit 1
The health and development of Australia's youth.
The transition from childhood to adulthood is a time that brings about enormous changes in physical, social, emotional and intellectual development. There is a wide variation in development as a result of inherited and environmental factors. Optimal health and individual human development for male and female youth sets the foundation for optimal health and individual human development in adulthood. Good health is an important determinant for optimal individual human development. In general, the health status of male and female youth in Australia is good and continues to improve. However, there are also many challenges to maintaining optimal health and individual human development for youth. This unit provides an opportunity for students to explore the physical, social, emotional and intellectual changes that occur and the inherited and environmental factors that influence health and development.

Unit 2
Individual human development and health issues
In Australia, families, communities and governments play a key role in optimising the health development of individuals across the lifespan. The community and governments have a responsibility to provide a range of services and programs that will optimise the health of all Australians beyond the particular responsibilities of families. Despite relatively high levels of community and government involvement, considerable differences in health and development outcomes continue to be experienced. In particular, indigenous Australians, some rural and remote communities and Australians from lower socio-economic backgrounds experience less than optimal health and development. Students explore the requirements for optimal health and development throughout the lifespan stages – prenatal, childhood and adulthood, and investigate inequitable health and development outcomes that can occur as a result of social and environmental factors.

Unit 3
Australia's health
This unit examines the health status of Australians and changing community expectations and approaches taken to improve the health of all. It includes a study of nutrition and nutritional requirements across the lifespan, and the effects of food selection on people's health. The role and responsibility of government and
other agencies in enhancing the health of all Australians through nutrition policies and food selection programs are evaluated.

Unit 4

Global health and development

This unit examines human development and health of people in industrialised and developing countries. The focus for the study is on optimal development and health across the lifespan. The operation of local health-care programs and the role of governments and international health-care agencies in improving development and health will be evaluated.
Physical Education

Subject Code: PED

Previous Years Materials & Resources Costs – guide only

Unit 1 & 2 $78.00
Unit 3 & 4 $78.00

VCE Physical Education explores the complex interrelationships between anatomical, biomechanical, physiological and skill acquisition principles to understand their role in producing and refining movement, and examines behavioural, psychological, environmental and sociocultural influences on performance and participation in physical activity.

The assimilation of theoretical understanding and practice is central to the study of VCE Physical Education. Students participate in practical activities to examine the core concepts that underpin movement and that influence performance and participation in physical activity, sport and exercise.

Through integrated physical, written, oral and digital learning experiences, students apply theoretical concepts and reflect critically on factors that affect all levels of performance and participation in sport, exercise and physical activity.

Assessment

Assessment across the four units of study includes a combination of the following tasks:

- Case study analysis
- Oral / visual presentation
- Media analysis
- Critically reflective folio / diary
- Practical laboratory reports
- Written response
- Test
- Exam

Career Pathways

Sports Coaching, Sport Psychology, Sports Trainer, Sports Massage, Sports Management, Exercise Science, Biomechanist, Teaching, Fitness Instructor, Fitness Advisor, Police Officer, Armed Forces, Physiotherapy, Osteopathy, Paramedic, Nursing, Health Promotion

Unit 1

The human body in motion

In this unit students explore how the musculoskeletal and cardiorespiratory systems work together to produce movement. Through practical activities students explore the relationships between the body systems and physical activity, sport and exercise, and how the systems adapt and adjust to the demands of
the activity. Students investigate the role and function of the main structures in each system and how they respond to physical activity, sport and exercise. They explore how the capacity and functioning of each system acts as an enabler or barrier to movement and participation in physical activity. Using a contemporary approach, students evaluate the social, cultural and environmental influences on movement. They consider the implications of the use of legal and illegal practices to improve the performance of the musculoskeletal and cardiorespiratory systems, evaluating perceived benefits and describing potential harms. They also recommend and implement strategies to minimise the risk of illness or injury to each system.

Unit 2

Physical Activity, sport and society

This unit develops students’ understanding of physical activity, sport and society from a participatory perspective. Students are introduced to types of physical activity and the role participation in physical activity and sedentary behaviour plays in their own health and wellbeing as well as in other people’s lives in different population groups. Through a series of practical activities, students experience and explore different types of physical activity promoted in their own and different population groups. They gain an appreciation of the level of physical activity required for health benefits. Students investigate how participation in physical activity varies across the lifespan. They explore a range of factors that influence and facilitate participation in regular physical activity. They collect data to determine perceived enablers of and barriers to physical activity and the ways in which opportunities for participation in physical activity can be extended in various communities, social, cultural and environmental contexts. Students investigate individual and population-based consequences of physical inactivity and sedentary behaviour. They then create and participate in an activity plan that meets the physical activity and sedentary behaviour guidelines relevant to the particular population group being studied.

Students apply various methods to assess physical activity and sedentary behaviour levels at the individual and population level, and analyse the data in relation to physical activity and sedentary behaviour guidelines. Students study and apply the social-ecological model and/or the Youth Physical Activity Promotion Model to critique a range of individual- and settings-based strategies that are effective in promoting participation in some form of regular physical activity.

Unit 3

Movement skills and energy for physical activity

This unit introduces students to the biomechanical and skill acquisition principles used to analyse human movement skills and energy production from a physiological perspective. Students use a variety of tools and techniques to analyse movement skills and apply biomechanical and skill acquisition principles to improve and refine movement in physical activity, sport and exercise. They use practical activities to demonstrate how correct application of these principles can lead to improved performance in physical activity and sport. Students investigate the relative contribution and interplay of the three energy systems to performance in physical activity, sport and exercise. In particular, they investigate the characteristics of each system and the interplay of the systems during physical activity. Students explore the causes of fatigue and consider different strategies used to postpone fatigue and promote recovery.
Unit 4

Training to improve performance

In this unit students analyse movement skills from a physiological, psychological and sociocultural perspective, and apply relevant training principles and methods to improve performance within physical activity at an individual, club and elite level. Improvements in performance, in particular fitness, depend on the ability of the individual and/or coach to gain, apply and evaluate knowledge and understanding of training. Students analyse skill frequencies, movement patterns, heart rates and work to rest ratios to determine the requirements of an activity. Students consider the physiological, psychological and sociological requirements of training to design and evaluate an effective training program. Students participate in a variety of training sessions designed to improve or maintain fitness and evaluate the effectiveness of different training methods. Students critique the effectiveness of the implementation of training principles and methods to meet the needs of the individual, and evaluate the chronic adaptations to training from a theoretical perspective.

Outdoor Environmental Education

Subject Code: OES

Previous Years Materials & Resources Costs – guide only

Unit 1 & 2 $500- $720 (approximate price range for 2017 – to be confirmed) (includes practical activities and trips)

Unit 3 & 4 $900 (approximate price range for 2017 – to be confirmed) (includes practical activities and trips)

Outdoor and Environmental Studies is a study of the ways humans interact with and relate to natural environments. Natural environments are understood to include environments that have minimum influence from humans, but they may also include environments that have been subject to human intervention. Ultimately, the study is directed towards enabling students to make critically informed comment on questions of environmental sustainability and to understand the importance of environmental health, particularly in local contexts.

Please note:

- Practical Applications of Knowledge and Skills (PAKS) field trips are compulsory and may require students to be involved in some of the following activities: bush walking, rock climbing, canoeing, cross country skiing, orienteering, surfing, cycling and ecological and naturalistic pursuits. The activities offered each year vary according to staff expertise, availability and cost.

- Each unit carries a levy. In addition to this, Outdoor and Environmental Studies students must meet the cost of practical activities and trips.

Guideline costs

Unit 1 & 2: $720.00 10 days 3 trips)

Unit 3 & 4: $900.00 10 days (2 trips)
The College can provide basic equipment such as coats, over pants, stoves, tents and sleeping mats. Students will be required to have access to appropriate lace up, leather walking boots, polypropylene thermal underwear and a 3-season sleeping bag. Equipment is discussed early in Unit 1 so students have the knowledge required to obtain the correct equipment. Parents are also provided with detailed information about equipment and clothing.

At Kyabram P – 12 College, Units 1 and 2 are offered at Year 10 and Year 11, and Units 3 and 4 are offered in Year 11 and Year 12. It is advised that you fast track this subject however it is only suggested.

### Assessment

Assessment across the four units of study includes a combination of the following tasks:

- Written report
- Multimedia/ oral presentation
- Short essay
- Poster
- Case study
- Data analysis
- Test
- Exam

### Career Pathways

Environmental Management, Coastal and Park Management, National Parks and Wildlife Ranger, Teaching, Hospitality, Eco Communications, Ecotourism, Environmental Science, Outdoor Education and Camp Leader, Outdoor Adventure Leader, Conservation, Environmental Policy and Sustainability, Land Rehabilitation, Pollution Control

### Unit 1

**Understanding outdoor experience**

This unit examines the ways in which humans understand and relate to nature through experiences of natural environments. The focus is on the individual and his/her personal relationship with the natural environment.

Students explore the many ways in which nature is understood and perceived. Through related outdoor experiences, students develop the practical skills and knowledge required to live comfortably, with minimal impact, in natural environments.

### Unit 2

**Environmental impacts**

This unit focuses on characteristics of natural environments, human impacts on natural environments, and how changes to nature affect people. The focus shifts from the individual’s personal relationship with the natural environment to society’s interaction with the natural environment. It includes analyses of historical
and contemporary conceptions of nature and human interactions with nature, including Nature's impact on humans.

Outdoor recreation provides the means for studying nature's impact on humans, as well as the ecological, social and economic implications of human impact on natural environments. A clear understanding of the impact of technology and changing human lifestyles on natural environments should also be developed.

Unit 3

Relationships with natural environments

This unit considers the ecological, historical and social contexts of relationships between humans and outdoor environments in Australia. It examines the impact of those relationships on the outdoor environment.

Students should experience one or more outdoor environments that have characteristics of natural environments and evidence of human intervention. The experiences provide the basis for comparison and opportunities to develop knowledge and skills in classroom and practical settings.

Unit 4

The future of human-nature interactions

This unit focuses on the conversation and use of the natural environment. It acknowledges the maintenance of natural environments and examines the capacity of the natural environment to support the future needs of the world's human population. It emphasises the need to develop a balance between human experiential requirements and the conservation of natural environments.

Students should experience one or more outdoor environments that have characteristics of natural environments and evidence of human intervention. The experiences provide the basis for comparison and opportunities to develop knowledge and skills in classroom and practical settings.
Humanities Domain
For further information about subjects in the Humanities Domain, please contact the Domain Leader:

Mrs Rowena Morris: morris.rowena.c@edumail.vic.gov.au

Subjects offered within the Humanities Domain in the VCE area include:

Business Subjects

- Accounting
- Australian and Global Politics
- Business Management
- Economics – Business
- Industry and Enterprise Studies
- Legal Studies

History Subjects

- History

Geography Subjects

- Geography

Accounting - Business

Subject Code: ACC
Previous Years Materials & Resources Costs – guide only

Unit 1 & 2 $48.50
Unit 3 & 4 $48.50

Unit 1

Establishing and operating a service business

Area of Study 1 – Going into business.

Students investigate the reasons for establishing a small business, factors that lead to the success or failure, sources of finance and how pre-operational decisions are made.

Area of Study 2 – Recording Financial data and reporting accounting

Students investigate, using manual and ICT methods, the role of accounting in the generation of financial data and accounting information for the owner of a service business. The focus is on the recording of financial data and the reporting of accounting information using a single entry recording system.
Unit 2

Accounting for a Trading Business

Area of Study 1 – Recording financial data and reporting accounting information

Students record financial data and report accounting information for a single activity sole trader using the single entry accounting system. Both manual and ICT methods of recording and reporting are used.

Area of Study 2 – ICT in accounting

Students use a commercial accounting software package to record financial data and report accounting information for a single activity sole trader, and to demonstrate their understanding of the importance of ICT in the accounting process.

Unit 3

Recording and Reporting for a trading business

Area of Study 1 – Recording financial data.

Students record data using double entry accounting to provide the owner with accounting information, enabling the owner to make informed decisions about the operation of the business.

Area of Study 2 – Balance day adjustments, reporting and interpreting accounting information

Students complete the accounting processes required at balance day and apply the accrual method of accounting in the preparation of accounting reports. They identify the differences between cash and profit and explain the implications of these differences.

Unit 4

Control and analysis of business performance

Area of Study 1 – Extension of recording and reporting.

Students collect, measure, process and communicate financial data and accounting information and explore alternative depreciation methods in the recording and reporting process.

Area of Study 2 – Financial planning and decision making.

The focus is on preparing budgeted accounting reports and analyzing financial and nonfinancial information. Student evaluation and suggest strategies to the owner on how to improve their business performance.
Australian and Global Politics

Subject Code: AGP
Previous Years Materials & Resources Costs – guide only
Unit 1 & 2 $48.50
Unit 3 & 4 $48.50

In this dynamic course you get the chance to find out what’s going on in the world.

In the 21st century, political decision and actions taken by individuals, groups, organisations and governments are increasing global in their impact. This subject studies the impact and significance of current global events. It encourages students to understand and reflect on contemporary national and international events and forces that shape them.

Unit 1

The National Citizen
Area of Study 1 – Power, politics and democracy
An introduction to politics, representation, citizenship, power and democracy in Australia.

Area of Study 2 – Exercising and challenging power
Students consider how and why people and groups become involved in politics. They analyse the characteristics of political activists, politicians and leaders. Students are introduced to the political values and ideologies including conservatism, liberalism, social democracy socialism and fundamentalism.

Unit 2

The Global Citizen
Area of Study 1 – Global threads
An introduction into how citizens in the 21st century interact and connect with the world. Investigations into international non-government organisations and global political movements and the way we communicate.

Area of Study 2 – Global and cooperation and conflict.
Investigations into how global communities work and its responsibilities in relation to managing cooperation, conflict and instability.

Unit 3

Evaluation Australian Democracy
Area of Study 1 – Australian democracy
In this area of study students are introduced to the most important values and principles that underpin democracy.
Area of Study 2 – Australian democracy in perspective

A comparison of the Australian political system with that of the USA, UK, FRG or India is undertaken.

Unit 4

Australian Public Policy

Area of Study 1 – Domestic Policy

The formulation and implementation of domestic public policy is investigated with an analysis of a contemporary issue undertaken.

Area of Study 2 – Foreign Policy

Students consider Australian foreign policy making over the past 10 years. They analyse the distinction between Australia’s foreign and domestic policies and the impacts from these.

Business Management

Subject Code: BUS

Previous Years Materials & Resources Costs – guide only

Unit 1 & 2 $48.50

Unit 3 & 4 $49.50

Unit 1

Small Business Management

You will:

- Examine the range of activities related to planning and operating a small business
- Set up and run your own small business. You will become owner / operator of a business, produce and sell a product or service and keep the profits.
- Learn how to write business reports to evaluate business success. These will form assessments.
- Learn how to use the language of the business world and the issues involved in the day to day operations of a business.

Unit 2

Communication and Management

You will:

- Examine a range of effective communication methods used in the world of business.
- Look at managing the marketing process in terms of how a business markets its products and services to gain a position in the marketplace.
- Study the public relations function and how businesses create an image for the public.
Unit 3

Corporate Management
In this unit you will:

- Investigate different management structures, corporate culture, management roles and policy development of large scale organizations.
- Go online and research large scale organizations, such as BHP, Telstra, the Banks, AMP, to discover the ways these businesses are managed and structured.

Unit 4

Human Resource and Operations
This unit examines corporate management with a focus on the human resource management function. Students learn about strategies used to most effectively manage human resources and finish with a focus on key change management processes and strategies.
Economic - Business

Subject Code: ECO

Previous Years Materials & Resources Costs – guide only

Unit 1 & 2 $48.50
Unit 3 & 4 $48.50

Unit 1

Economics: Choices and Consequences
This unit focuses on the Australian economy and studies the national markets, economic decision making and issues of importance in the twenty-first century. Students are introduced to the nature, operation and role of markets within the Australian economy and the economic issues associated with it. This unit examines the definitions of the Australian economy and how markets work and how economic decisions are made in the Australian economy by individuals, groups, businesses and governments and how those decisions impact on the standard of living of Australians and the stability of the economy.

Unit 2

Economic change issues and challenges
This unit focuses on the changing nature of Australia's population and the impact upon future rates of growth and living standards as well as the challenges we face with our aging population. The unit also examines our place in the global economy, and the contemporary global economic issues and the effect on domestic and international households, businesses, governments and other relevant groups. The unit examines definitions of economic globalisation reasons for its emergence and the effects of globalisation on participants in the economy. Examples of other economies outside Australia are also examined.

Unit 3 and Unit 4

Economic Activity and Economic Management
You will:

- Understand what is happening in the economy and why.
- Learn that the Government has a number of economic objectives including full employment, economic growth price stability, successful trade with the rest of the world and how wealth and income are distributed in our country.
- Learn that there are a number of causes of problems such as inflation, unemployment and Australia 'playing its way' in our trade with other countries.
- Learn about Government economic policies and how they can be used to manage the economy and hopefully improve the standard of living of all Australians. These would, for example, include the budget, interest rates, policies on employment and policies on how to make goods and services cheaper and more efficient.
- Use current information gathered from a variety of sources including newspapers, magazine articles, radio and television programs to examine Australia's current performance and where we might be heading in the future.
Learn to apply what you know to particular situations.

Industry and Enterprise Studies

Subject Code: IES
Previous Years Materials & Resources Costs – guide only

Unit 1 & 2 $70.00
Unit 3 & 4 $70.00

Industry & Enterprise, Units 1, 2, & 3 incorporate a work placement of 35 hours duration. Students develop work-related skills, observe industry and employment trends and study many issues such as enterprising behaviours, quality, workplace flexibility and training, to mention a few.

Unit 1

Workplace Participation
Students explore the importance of employability and enterprising skills through work placement and case studies of successful businesses and individuals. They will also research a work-related issue, and consider strategies related to the development of interpersonal skills and effective communication.

Unit 2

Being Enterprising
In this unit students explore the development of enterprising behaviour, leadership and innovation in different settings within industry. Students learn that enterprising and leadership behaviours are vital for success in diverse personal, work and community settings. Globalisation, technological change, environmental issues will be analysed by students to assess the impact they are having on industry.

Unit 3

Enterprise Culture
Work settings within Australian industries are continually affected by ongoing forces for change and to succeed they need to respond in enterprising ways. Students explore the role and impact of four forces for change: the management of quality, workplace flexibility, technology and training and workplace learning, in developing an enterprise culture within an industry.

Unit 4

Industry change and innovation
This unit looks at pressures and opportunities for change. Students will investigate the role of Government, international competitiveness, changing societal values and attitudes and environmental sustainability. Innovation is a key agent of change and students will investigate innovation and investigate its importance for a selected Australian industry.
Legal Studies

Subject Code: LEG
Previous Years Materials & Resources Costs – guide only

Unit 1 & 2 $48.50
Unit 3 & 4 $48.50

Unit 1

Criminal Law in action
This unit explores:

- Law in society
- Criminal Law
- The Criminal courtroom

This unit focuses on:

- Need for laws in society
- Different crimes and criminal liability
- Criminal jurisdiction of our court system
- Procedures of a criminal trial
- Role and operation of a jury

Unit 2

Issues in Civil Law
This unit explores:

- Civil law and what is it?
- Resolution of civil disputes
- Issues of civil law
- Question of rights

This unit focuses on:

- The effective resolution of civil disputes
- The processes and procedures involved in civil litigation and the possible defences to civil claims within our legal system available to enforce the civil rights of our citizens.
- The judicial procedure to resolve civil disputes
- Investigating the alternative avenues of dispute resolution and their effectiveness
Unit 3

Law Making

- Role of parliament and the individual in law making.
- The constitution. How it work? How does it protect democratic rights?
- Role of courts in law making and how a decision in court can change a law.

Unit 4

Resolution and Justice

This unit:

- Explores the function and jurisdiction of the courts, tribunals and alternative avenues of dispute resolution with a view to comparing and evaluating the operation of the various dispute resolution methods.
- Students develop an understanding of the criminal and civil pre-trial and trial processes and procedures which operate within the Victorian legal system
- What makes an effective legal system
History

Subject Code:  HIS

Previous Years  Materials & Resources Costs – guide only

Unit 1 & 2  $48.50
Unit 3 & 4  $48.50

Unit 1

Twentieth Century History 1900-1945
In Unit 1 student explore the nature of political, social and cultural change in the period between the world wars.

Area of Study 1 Ideology and conflict
In this area of study students explore the events, ideologies and movements of the period after World War One; the emergence of conflict; and the causes of World War Two. They investigate the impact of the treaties which ended the Great War and which redrew the map of Europe and broke up the former empires of the defeated nations. They consider the aims, achievements and limitations of the League of Nations.

Area of Study 2 Social and cultural change
In this area of study students focus on the social life and cultural expression in the 1920s and 1930s and their relation to the technological, political and economic changes of the period. Students explore particular forms of cultural expression from the period in one or more of the following contexts: Italy, Germany, Japan, USSR and/or USA.

Unit 2

Twentieth Century History 1945-2000
In Unit 2 students explore the nature and impact of the Cold War and challenges and changes to existing political, economic and social arrangements in the second half of the twentieth century.

Area of Study 1 Competing ideologies
In this area of study students focus on causes and consequences of the Cold War; the competing ideologies that underpinned events, the effects on people, groups and nations, and the reasons for the end of this sustained period of ideological conflict.

Area of Study 2 Challenge and change
In this area of study students focus on the ways in which traditional ideas, values and political systems were challenged and changed by individuals and groups in a range of contexts during the period 1945 to 2000. Students explore the causes of significant political and social events and movements, and their consequences for nations and people.
Units 3 & 4

Revolutions
In Unit 3 the Russian Revolution is studied, while the Chinese Revolution is studied in Unit 4. The Areas of Study remain the same.

Area of Study 1 – Causes of Revolutions
In this area of study students analyse the long-term causes and short-term triggers of revolution. They evaluate how revolutionary outbreaks are caused by the interplay of significant events, ideas, individuals and popular movements and assess how these were directly or indirectly influenced by the social, political, economic and cultural conditions.

Area of Study 2 – Consequences of Revolution
In this area of study students analyse the consequences of the revolution and evaluate the extent to which it brought change to society. The success of the revolution was not inevitable; therefore, students analyse the significant challenges that confronted the new regime after the initial outbreak of revolution. Furthermore, they evaluate the success of the new regime’s responses to these challenges and the extent to which the consequences of revolution resulted in dramatic and wide reaching social, political, economic and cultural change, progress or decline.
Geography

Subject Code: GEO
Previous Years Materials & Resources Costs – guide only

Unit 1 & 2 $48.50
Unit 3 & 4 $48.50

Unit 1

Hazards and Disasters
In this unit students undertake an overview of hazards before investigating two contrasting types of hazards and the responses to them by people.

Area of Study 1 Characteristics of Hazards
In this area of study students examine hazards and hazard events before engaging in a study of at least two specific hazards at a range of scales. They study one from at least two different types of hazards from the list provided, for example, coastal hazards and an alien animal invasion, or floods and oil spills. The selection of hazards should allow students to use visual representations and topographical maps at various scales and undertake fieldwork.

Area of Study 2 Response to Hazards and Disasters
In this area of study students explore the nature and effectiveness of specific measures such as prediction and warning programs, community preparedness and land use planning, as well as actions taken after hazards become harmful and destructive disasters. They study natural and human factors influencing the nature of human responses, considering the scale of the hazard, levels of risk due to hazards, past experiences and perceptions of similar hazards and hazard events, the economic choices available to government organisations and communities to take action, available technological resources and the ability to plan and develop effective prevention and mitigation measures. Students investigate the human responses to the hazards selected in Area of Study 1, with reference to a variety of locations.

Unit 2

Tourism
In this unit students investigate the characteristics of tourism, with particular emphasis on where it has developed, its various forms, how it has changed and continues to change and its impacts on people, places and environments.

Area of Study 1 Characteristics of Tourism
In this area of study students examine the characteristics of tourism, the location and distribution of different types of tourism and tourist destinations and the factors affecting different types of tourism. Students support this investigation with contrasting examples from within Australia and elsewhere in the world. They investigate in detail at least one tourism location using appropriate fieldwork techniques, and one other location elsewhere in the world. The selection of examples should allow students to work with a range of
information sources, for example statistical data, digital images, streamed video and a variety of maps at various scales, as well as undertake fieldwork.

**Area of Study 2 Impact of Tourism**

In this area of study students explore the environmental, economic and socio-cultural impacts of different types of tourism. They investigate at least one tourism location, using appropriate fieldwork techniques, and another elsewhere in the world. Students evaluate the effectiveness of measures taken to enhance the positive impacts and/or to minimise the negative impacts at these locations. This fieldwork site could be the same location used for Area of Study 1. They investigate the interconnection of the two selected locations with their surrounding region and national context.

**Unit 3**

*Changing the Land*

This unit focuses on two investigations of geographical change: change to land cover and change to land use.

**Area of Study 1 Land use change**

In this area of study students select a local area and use appropriate fieldwork techniques and secondary sources to investigate the processes and impacts of land use change. This change may have recently occurred, is underway or is planned for the near future.

**Area of Study 2 Land cover change**

In this area of study students undertake an overview of global land cover and changes that have occurred over time. They investigate three major processes that are changing land cover: deforestation, desertification and melting glaciers and ice sheets. They analyse these processes, explain their impacts on land cover and discuss responses to these land cover changes at three different locations in the world – one location for each process. They also evaluate three different global responses to the impacts of land cover change, one global response for each process.

**Unit 4**

*Human Population – Trends and Issues*

In this unit students investigate the geography of human populations. They explore the patterns of population change, movement and distribution, and how governments, organisations and individuals have responded to those changes in different parts of the world.

**Area of Study 1 Population dynamics**

In this area of study students undertake an overview of world population distribution and growth before investigating the dynamics of population change over time and space. Through the study of population dynamics students investigate growth and decline in fertility and mortality, together with population...
movements. Students study forced and voluntary, and internal and external, population movements and how they can be long term or short term. The study is supported with examples from within and between countries with different economic and political conditions and social structures that illustrate the dynamics of population. Students develop understanding of the Demographic Transition Model and its applications, and the Malthusian theory of population.

**Area of Study 2 Population issues and challenges**

In this area of study students undertake investigations into two significant population trends that have developed in different parts of the world: a growing population of one country and an ageing population of another country.
Languages Domain

For further information about subjects in the Languages Domain, please contact the Domain Leader:

Ms Jan Auld auld.janis.m@edumail.vic.gov.au

Mathematics Domain

For further information about subjects in the Mathematics Domain, please contact the Domain Leader:

Mrs Lisa Stevens stevens.lisa.l@edumail.vic.gov.au

Subjects offered within the Maths Domain in the VCE area include:

- VCAL Numeracy
- General Mathematics Units 1 and 2
- Mathematical Methods CAS Units 1 and 2
- Specialist Mathematics Units 1 and 2
- Further Mathematics Units 3 and 4
- Mathematical Methods CAS Units 3 and 4
- Specialist Mathematics Units 3 and 4

Mathematical Pathways in VCE

PATHWAYS FOR YEAR 11 AND YEAR 12 MATHEMATICS
VCAL and VCE

- You are encouraged to seek advice from your teacher when choosing your course
- All VCE mathematics requires a TI-nspire CAS calculator
- Any Specialist subject must be undertaken in conjunction with Mathematical Methods
VCAL Numeracy

Subject Code: MVC

Previous Years Materials & Resources Costs – guide only

Intermediate $24.50
Senior $34.50

Intermediate and Foundation

This unit enables students to develop everyday numeracy skills in order to make sense of their daily personal and public lives. The maths involved includes measurement, shape, numbers and graphs applied to tasks which are part of the learner’s normal routine but extending to applications outside their immediate personal environment such as the workplace and the community, whether first hand or portrayed by the media.

Students will study Design, Measuring, Money and Time, Locations, Data, and Numerical Information. Students must demonstrate competency in five of the six outcomes.

Senior

This unit enables students to explore mathematics beyond familiar and everyday use to its application in wider less personal contexts such as newspapers and other media reports, workplace documents and procedures, and specific projects at home or in the community.

At the end of the unit learners will have the capacity to interpret and analysis how mathematics is represented and used. They can recognise and use some of the conventions and symbolism of formal mathematics. The mathematics involved includes measurement, graphs and simple statistics, use of maps and directions and an introductory understanding of the use of formulae and problem solving strategies.

Students are expected to demonstrate competency in six of the following seven outcomes: Design, Measuring, Location, Data, Numerical Information, Formulae, Problem Solving.
General Mathematics – Units 1 and 2

Subject Code: MGE

Previous Years Materials & Resources Costs – guide only

Unit 1 & 2 $26.50
Unit 3 & 4 $38.50

These units are designed as preparation for Further Mathematics Units 3 and 4.

All students are expected to purchase (or have) an approved CAS calculator for General Mathematics. It should be retained for Further Mathematics Units 3 and 4.

Unit 1

General Mathematics (Further) focuses on everyday maths applications. Students will use and apply number skills and technology. A significant statistical content will be studied, as well as applications to solve equations in practical applications, financial situations and shape and measurement.

Unit 2

Students will build on skills obtained from Unit 1 and continue to acquire skills in statistics, geometry and trigonometry. Further material will be drawn from the study of networks and matrices, with a reliance on CAS technology.

Further Mathematics - Unit 3 and 4

Unit 3 & 4 Further Mathematics is intended to provide a sound platform for life experiences involving financial and decision making maths. Further Mathematics consists of core material of Data Analysis and Recursion and Financial Modelling, and then a selection of two modules from Geometry and Trigonometry, Graphs and Relations, Matrices and Network and Decision Mathematics.

All students are expected to purchase (or have) an approved CAS calculator for Further Mathematics. It should be retained from General Mathematics Units 1 and 2.
Mathematical Methods CAS

Subject Code: MME

Previous Years Materials & Resources Costs – guide only

Unit 1 & 2 $26.50
Unit 3 & 4 $38.50

All students in Mathematical Methods CAS Units 1 -4 are expected to purchase (or have) an approved CAS calculator.

Mathematical Methods Units 1 and 2 can be taken in combination with General Mathematics Units 1 and 2 in order to provide a sound mathematical platform for the study of Further Mathematics Units 3 and 4.

Students wishing to study Specialist Maths in Year 12 should study BOTH Mathematical Methods CAS Units 1 and 2 and Specialist Mathematics Units 1 and 2

Unit 1 and Unit 2
Students are expected to have a sound background in algebra and linear relations.

Students will study topics from Functions and graphs, Algebra, Calculus and Probability, and will build on previously acquired skills and knowledge from Year 10.

Unit 3 and Unit 4

Mathematical Methods CAS
Students will undertake studies and analysis tasks in Coordinate Geometry, Circular (Trigonometric) Functions, Algebra, Calculus and Statistics and Probability, and will build on the skills and knowledge of Units 1 and 2.
Specialist Mathematics

Subject Code: MSP

Previous Years Materials & Resources Costs – guide only

Unit 1 & 2 $26.50
Unit 3 & 4 $38.50

Co-requisite: Mathematical Methods. That is, any student completing Specialist Mathematics at either level must complete Mathematical Methods at the same level.

All students in Specialist Maths are expected to purchase (or have) an approved CAS calculator.

Specialist Mathematics is designed to complement intended studies in Science, Engineering Mathematics and Computer Science.

Unit 1 and Unit 2

This unit involves rigorous mathematical application and requires sound mathematical skills as well as the ability and willingness to acquire new algebraic and trigonometric skills to prepare for Specialist Maths Units 3 and 4.

Material studied will be drawn from the following areas of study: Arithmetic and number, Geometry, measurement and trigonometry, Graphs of linear and non-linear relations, Algebra and structure, Transformations and matrices, Discrete mathematics, Statistics.

Students will continue to use and apply skills and knowledge from Year 10 as well as Mathematical Methods.

Unit 3 and Unit 4

Students will undertake studies and analysis tasks from the following areas of study: Functions and graphs, Algebra, Calculus, Vectors, Mechanics and Statistics.

All students are expected to have an approved CAS calculator.
Science Domain

For further information about subjects in the Science Domain, please contact the Domain Leader:

Mrs Rowena Morris: morris.rowena.c@edumail.vic.gov.au

Subjects offered within the Science Domain in the VCE area include:

- Agriculture and Horticulture studies
- Biology
- Chemistry
- Physics
- Psychology

Agriculture and Horticulture Studies

Subject Code: AGH

Previous Years Materials & Resources Costs – guide only

- Unit 1 & 2 $120.00 (includes practical activities and trips)
- Unit 3 & 4 $120.00 (includes practical activities and trips)

Unit 1

Agriculture and Horticulture Operations

This unit comprises two areas of study:

Elements of Australian agricultural and horticultural systems

- Students study the elements that constitute agricultural and horticultural systems and how these influence where they are located.

Agricultural and horticultural operations.

- Students will work individually and in a group to plan and conduct a small business project involving the care of living plants or animals.
- Students will develop a detailed operational plan.
- Students will visit several farm enterprises and field day events.
- Work closely with government organisations – DPI (Department of Primary Industries)

Unit 2

Production

This unit comprises two areas of study:

Biological factors in agriculture and horticulture.

- Students focus on nutrition, reproduction and genetics in plants and animals and how these relate to agricultural and horticultural systems.
• The influence of biological factors and role of scientific research on production are also covered.
  Production systems and processes.

• Students will explore the role of agricultural and horticultural businesses in adding value to products.
• The student’s small business project is used to investigate and report on factors related to production processes, risk management and marketing and how they contribute to the value of a product and are influenced by and impact upon the environment in which they operate.

Unit 3

Technology, Innovation and Business design

Technology in this unit refers to the equipment, techniques and processes that can be used to maintain and enhance efficiency and effectiveness of agricultural and horticultural systems.

This unit comprises three areas of study:

Current Technology

• Students focus on technology commonly used in agriculture and / or horticulture. Using a case study approach students will focus on the technologies used by one or two fully commercial businesses. New and emerging technology
• Students will focus on new technology or emerging technology that has only been adopted by a small number of businesses.
• Students will research, analyse and evaluate these technologies using recent publications and the internet.

Business Design

• Students focus on the design of a small business project plan, including production, marketing and financial planning.
• Analysis and planning for risk management is also included.

Unit 4

Sustainable Management

This unit focuses on the management of agricultural and / or horticultural systems within the context of ecological sustainability.

This unit comprises three areas of study: Business plan implementation and evaluation.

• Students focus on the continued operation of their project commenced in Unit 3. Monitoring its progress and evaluating its performance and outcomes.

Sustainability in agriculture and / or horticulture.

• Students focus on concepts of sustainability and how they relate to productivity.
  Resource management and maintenance
- Students will study resource management practices within agricultural and horticultural systems and the role of government agencies in influencing these practices.
- Students will be able to apply and analyse the concepts of sustainability to resource management.

**Biology**

**Subject Code:** BIO

Previous Years Materials & Resources Costs – guide only

<table>
<thead>
<tr>
<th>Unit</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
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<td>$60.00</td>
</tr>
<tr>
<td>3 &amp; 4</td>
<td>$70.00</td>
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</tbody>
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The staged implementation of the new study design saw it being introduced for Units 1 and 2 in 2016, and Units 3 and 4 in 2017. Second hand textbooks may be available for Units 1 and 2 but are not available for Units 3 and 4.

**Unit 1**

*How do living things stay alive?*

Unit 1 comprises of three areas of study:

**Area of study 1 – How do organisms function?**

In this area of study students examine the structure and functioning of cells and how the plasma membrane contributes to survival by controlling the movement of substances into and out of the cell. Although the internal structure of a cell varies, all cells require a relatively stable internal environment for optimal functioning. Whether life forms are unicellular or multicellular, or heterotrophic or autotrophic, whether they live in a deep ocean trench, a tropical rain forest, an arid desert or on the highest mountain peak, all individual organisms are faced with the challenge of obtaining nutrients and water, exchanging gases, sourcing energy and having a means of removal of waste products.

**Area of study 2 – How do living systems sustain life?**

In this area of study students examine the structural, physiological and behavioural adaptations of a range of organisms that enable them to survive in a particular habitat and to maintain a viable population size over time. Students consider the distinction between the external and internal environment of an organism and examine how homeostatic mechanisms maintain the internal environment within a narrow range of values for factors including temperature, blood glucose and water balance. They explore the importance and implications of organising and maintaining biodiversity and examine the nature of an ecosystem in terms of the network of relationships within a community of diverse organisms. Students identify a keystone species, explore an organism’s relationship to its habitat and evaluate the impact of abiotic factors on the distribution and abundance of organisms within the community. Factors affecting population size and growth are analysed.

**Area of study 3 – Practical Investigation**
Survival requires control and regulation of factors within an individual and often outside the individual. In this area of study students design and conduct a practical investigation into the survival of an individual or a species. The investigation requires the student to develop a question, plan a course of action to answer the question, undertake an investigation to collect the appropriate primary qualitative and/or quantitative data, organise and interpret the data and reach a conclusion in response to the question. The investigation is to be related to knowledge and skills developed in Areas of Study 1 and/or 2 and is conducted by the student through laboratory work, fieldwork and/or observational studies.

Unit 2

**How is continuity of life maintained?**

Unit 2 comprises of three areas of study.

Area of study 1 – How does reproduction maintain the continuity of life?

In this area of study students consider the need for the cells of multicellular organisms to multiply for growth, repair and replacement. They examine the main events of the cell cycle in prokaryotic and eukaryotic cells. Students become familiar with the key events in the phases of the cell cycle, and focus on the importance of the processes involved in a cell’s preparation for cell division. Students investigate and use visualisations and modelling to describe the characteristics of each of the phases in mitosis. Cytokinesis is explained for both plant and animal cells. Students describe the production of gametes in sexual reproduction through the key events in meiosis and explain the differences between asexual and sexual reproduction in terms of the genetic makeup of daughter cells.

Students consider the role and nature of stem cells, their differentiation and the consequences for human prenatal development and their potential use to treat injury and disease.

Area of study 2 – How is inheritance explained?

In this area of study students build on their understanding of the nature of genes and the use of genetic language to read and interpret patterns of inheritance and predict outcomes of genetic crosses. They gain an understanding that a characteristic or trait can be due solely to one gene and its alleles, or due to many genes acting together, or is the outcome of genes interacting with external environmental or epigenetic factors. Students apply their genetic knowledge to consider the social and ethical implications of genetic applications in society including genetic screening and decision making regarding the inheritance of autosomal and sex-linked conditions.

Area of study 3 – Investigation of an issue

The increasing uses and applications of genetics knowledge and reproductive science in society both provide benefits for individuals and populations and raise social, economic, legal and ethical questions. Human cloning, genetic modification of organisms, the use of forensic DNA databanks, assisted reproductive technologies and prenatal and predictive genetic testing challenge social and ethical norms. In this area of study students apply and extend their knowledge and skills developed in Areas of Study 1 and/or 2 to investigate an issue involving reproduction and/or inheritance.

They communicate the findings of their investigation and explain the biological concepts, identify different opinions, outline the legal, social and ethical implications for the individual and/or species and justify their conclusions.

Material for the investigation can be gathered from laboratory work, computer simulations and modelling,
literature searches, global databases and interviews with experts.

Unit 3

How do cells maintain life?

Unit 3 comprises of two areas of study

Area of study 1 – How does cellular processes work?

In this area of study students focus on the cell as a complex chemical system. They examine the chemical nature of the plasma membrane to compare how hydrophilic and hydrophobic substances move across it. They model the formation of DNA and proteins from their respective subunits. The expression of the information encoded in a sequence of DNA to form a protein is explored and the nature of the genetic code outlined. Students use the lac operon to explain prokaryotic gene regulation in terms of the ‘switching on’ and ‘switching off’ of genes. Students learn why the chemistry of the cell usually takes place at relatively low, and within a narrow range of, temperatures. They examine how reactions, including photosynthesis and cellular respiration, are made up of many steps that are controlled by enzymes and assisted by coenzymes. Students explain the mode of action of enzymes and the role of coenzymes in the reactions of the cell and investigate the factors that affect the rate of cellular reactions.

Area of study 2 – How do cells communicate?

In this area of study students focus on how cells receive specific signals that elicit a particular response. Students apply the stimulus-response model to the cell in terms of the types of signals, the position of receptors, and the transduction of the information across the cell to an effector that then initiates a response. Students examine unique molecules called antigens and how they elicit an immune response, the nature of immunity and the role of vaccinations in providing immunity. They explain how malfunctions in signaling pathways cause various disorders in the human population and how new technologies assist in managing such disorders.

Unit 4

How does life change and respond to challenges over time?

Unit 4 comprises of three areas of study

Area of study 1 – How are species related?

In this area of study students focus on changes to genetic material over time and the evidence for biological evolution. They investigate how changes to genetic material lead to new species through the process of natural selection as a mechanism for evolution. Students examine how evolutionary biology and the relatedness of species is based upon the accumulation of evidence. They learn how interpretations of evidence can change in the light of new evidence as a result of technological advances, particularly in molecular biology. The human fossil record is explored to identify the major biological and cognitive trends that have led to a complex interrelationship between biology and culture.
Area of study 2 – How do humans impact on biological processes?

In this area of study students examine the impact of human culture and technological applications on biological processes. They apply their knowledge of the structure and function of the DNA molecule to examine how molecular tools and techniques can be used to manipulate the molecule for a particular purpose. Students describe gene technologies used to address human issues and consider their social and ethical implications. Scientific knowledge can both challenge and be challenged by society. Students examine biological challenges that illustrate how the reception of scientific knowledge is influenced by social, economic and cultural factors.

Area of study 3 – Practical investigation

A student-designed or adapted investigation related to cellular processes and/or biological change and continuity over time is undertaken in either Unit 3 or Unit 4, or across both Units 3 and 4. The investigation is to relate to knowledge and skills developed across Units 3 and 4 and may be undertaken by the student through laboratory work and/or fieldwork.

The investigation requires the student to identify an aim, develop a question, formulate a hypothesis and plan a course of action to answer the question and that complies with safety and ethical guidelines. The student then undertakes an experiment that involves the collection of primary qualitative and/or quantitative data, analyses and evaluates the data, identifies limitations of data and methods, links experimental results to science ideas, reaches a conclusion in response to the question and suggests further investigations which may be undertaken. The results of the investigation are presented in a scientific poster format according to the template provided on page 12. A practical logbook must be maintained by the student for record, authentication and assessment purposes.
Chemistry

Subject Code: CHE

Previous Years Materials & Resources Costs – guide only

Unit 1 & 2 $60.00
Unit 3 & 4 $70.00

Students enrolling in Chemistry Units 3 and 4 MUST have satisfactorily completed Chemistry Unit 2.

The staged implementation of the new study design saw it being introduced for Units 1 and 2 in 2016, and Units 3 and 4 in 2017. Second hand textbooks may be available for Units 1 and 2 but are not available for Units 3 and 4.

Unit 1

How can the diversity of materials be explained?

Unit 1 comprises of three areas of study.

Area of study 1 – How can knowledge of elements explain the properties of matter?

In this area of study students focus on the nature of chemical elements, their atomic structure and their place in the periodic table. They review how the model of the atom has changed over time and consider how spectral evidence led to the Bohr model and subsequently to the Schrödinger model. Students examine the periodic table as a unifying framework into which elements are placed based upon similarities in their electronic configurations.

In this context students explore patterns and trends of, and relationships between, elements with reference to properties of the elements including their chemical reactivity.

Students investigate the nature of metals and their properties, including metallic nanomaterials. They investigate how a metal is extracted from its ore and how the properties of metals may be modified for a particular use.

Students apply their knowledge of the electronic structures of metallic elements and non-metallic elements to examine ionic compounds. They study how ionic compounds are formed, explore their crystalline structures and investigate how changing environmental conditions may change their properties.

Fundamental quantitative aspects of chemistry are introduced including the mole concept, relative atomic mass, percentage abundance and composition by mass and the empirical formula of an ionic compound.

Area of study 2 – How can the versatility of non-metals be explained?

In this area of study students explore a wide range of substances and materials made from non-metals including molecular substances, covalent lattices, carbon nanomaterials, organic compounds and polymers.

Students investigate the relationship between the electronic configurations of non-metallic atoms and the resultant structures and properties of a range of molecular substances and covalent lattices. They compare how the structures of these non-metallic substances are represented and analyse the limitations of these representations.
Students study a variety of organic compounds and how they are grouped into distinct chemical families. They apply rules of systematic nomenclature to each of these chemical families. Students investigate useful materials that are made from non-metals, and relate their properties and uses to their structures. They explore the modification of polymers and the use of carbon-based nanoparticles for specific applications. Students apply quantitative concepts to molecular compounds, including mole concept and percentage composition by mass, and determine the empirical and molecular formulas of given compounds.

**Area of study 3 – Research Investigation**

Knowledge of the origin, structure and properties of matter has built up over time through scientific and technological research, including medical research, space research and research into alternative energy resources. As a result, patterns and relationships in structures and properties of substances have been identified, applied and modified, and a vast range of useful materials and chemicals has been produced. This research and development is ongoing and new discoveries are being made at an accelerating rate. In this area of study students apply and extend their knowledge and skills developed in Area of Study 1 and/or Area of Study 2 to investigate a selected question related to materials. They apply critical and creative thinking skills, science inquiry skills and communication skills to conduct and present the findings of an independent investigation into one aspect of the discoveries and research that have underpinned the development, use and modification of useful materials or chemicals. Students undertake a research investigation relevant to one of the following ten options. A question from the list under each option may be selected or students may develop their own research question relevant to Area of Study 1 and/or Area of Study 2 in conjunction with their teacher. For the selected question, students outline, analyse and evaluate relevant evidence to support their conclusions.

**Unit 2**

**What makes water such a unique chemical?**

Unit 2 comprises of three areas of study

**Area of study 1 – How do substances interact with water?**

In this area of study students focus on the properties of water and the reactions that take place in water including acid-base and redox reactions. Students relate the properties of water to the water molecule’s structure, polarity and bonding. They also explore the significance of water’s high specific heat capacity and latent heat of vaporization for living systems and water supplies. Students investigate issues associated with the solubility of substances in water. Precipitation, acid-base and redox reactions that occur in water are explored and represented by the writing of balanced equations. Students compare acids with bases and learn to distinguish between acid strength and acid concentration. The pH scale is examined and students calculate the expected pH of strong acids and strong bases of known concentration.

**Area of study 2 – How are substances in water measured and analysed?**

In this area of study students focus on the use of analytical techniques, both in the laboratory and in the field, to measure the solubility and concentrations of solutes in water, and to analyse water samples for various solutes including chemical contaminants. Students examine the origin and chemical nature of substances that may be present in a water supply, including contaminants, and outline sampling techniques used to assess water quality. They measure the solubility of
substances in water, explore the relationship between solubility and temperature using solubility curves and learn to predict when a solute will dissolve or crystallise out of solution.

The concept of molarity is introduced and students measure concentrations of solutions using a variety of commonly used units. Students apply the principles of stoichiometry to gravimetric and volumetric analyses of aqueous solutions and water samples. Instrumental techniques include the use of colorimetry and/or UV-visible spectroscopy to estimate the concentrations of coloured species in solution, atomic absorption spectroscopy data to determine the concentration of metal ions in solution and high performance liquid chromatography data to calculate the concentration of organic compounds in solution.

Area of study 3 – Practical Investigation

Substances that are dissolved in water supplies may be beneficial or harmful, and sometimes toxic, to humans and other living organisms. They may also form coatings on, or corrode, water pipes. In this area of study students design and conduct a practical investigation into an aspect of water quality. The investigation relates to knowledge and skills developed in Area of Study 1 and/or Area of Study 2 and is conducted by the student through laboratory work and/or fieldwork.

The investigation requires the student to develop a question, plan a course of action that attempts to answer the question, undertake an investigation to collect the appropriate primary qualitative and/or quantitative data (which may including collecting water samples), organise and interpret the data and reach a conclusion in response to the question.

Unit 3

How can chemical processes be designed to optimise efficiency?

Unit 3 comprises of two areas of study

Area of study 1 – What are the options for energy production?

In this area of study students focus on analysing and comparing a range of energy resources and technologies, including fossil fuels, biofuels, galvanic cells and fuel cells, with reference to the energy transformations and chemical reactions involved, energy efficiencies, environmental impacts and potential applications. Students use the specific heat capacity of water and thermochemical equations to determine the enthalpy changes and quantities of reactants and products involved in the combustion reactions of a range of renewable and non-renewable fuels.

Students conduct practical investigations involving redox reactions, including the design, construction and testing of galvanic cells, and account for differences between experimental findings and predictions made by using the electrochemical series. They compare the design features, operating principles and uses of galvanic cells and fuel cells, and summarise cell processes by writing balanced equations for half and overall cell processes.

Area of study 2 – How can the yield of a chemical product be optimised?
In this area of study students explore the factors that increase the efficiency and percentage yield of a chemical manufacturing process while reducing the energy demand and associated costs. Students investigate how the rate of a reaction can be controlled so that it occurs at the optimum rate while avoiding unwanted side reactions and by-products. They explain reactions with reference to the collision theory including reference to Maxwell-Boltzmann distribution curves. The progression of exothermic and endothermic reactions, including the use of a catalyst, is represented using energy profile diagrams. Students explore homogeneous equilibrium systems and apply the equilibrium law to calculate equilibrium constants and concentrations of reactants and products. They investigate Le Chatelier’s principle and the effect of different changes on an equilibrium system and make predictions about the optimum conditions for the production of chemicals, taking into account rate and yield considerations. Students represent the establishment of equilibrium and the effect of changes to an equilibrium system using concentration-time graphs. Students investigate a range of electrolytic cells with reference to their basic design features and purpose, their operating principles and the energy transformations that occur. They examine the discharging and recharging processes in rechargeable cells, and apply Faraday’s laws to calculate quantities in electrochemistry and to determine cell efficiencies.

Unit 4

How are organic compounds categorised, analysed and used?
Unit 4 comprises of three areas of study

Area of study 1 – How can the diversity of carbon compounds be explained and categorised?

In this area of study students explore why such a vast range of carbon compounds is possible. They examine the structural features of members of several homologous series of compounds, including some of the simpler structural isomers, and learn how they are represented and named. Students investigate trends in the physical and chemical properties of various organic families of compounds. They study typical reactions of organic families and some of their reaction pathways, and write balanced chemical equations for organic syntheses. Students learn to deduce or confirm the structure and identity of organic compounds by interpreting data from mass spectrometry, infrared spectroscopy and proton and carbon-13 nuclear magnetic resonance spectroscopy.

Area of study 2 – What is the chemistry of food?

Food contains various organic compounds that are the source of both the energy and the raw materials that the human body needs for growth and repair. In this area of study students explore the importance of food from a chemical perspective. Students study the major components of food with reference to their structures, properties and functions. They examine the hydrolysis reactions in which foods are broken down, the condensation reactions in which new biomolecules are formed and the role of enzymes, assisted by coenzymes, in the metabolism of food. Students study the role of glucose in cellular respiration and investigate the principles of calorimetry and its application in determining enthalpy changes for reactions in solution. They explore applications of food chemistry by considering the differences in structures of natural and artificial sweeteners, the chemical
significance of the glycaemic index of foods, the rancidity of fats and oils, and the use of the term ‘essential’ to describe some amino acids and fatty acids in the diet.

Area of study 3 – Practical Investigation

A student-designed or adapted practical investigation related to energy and/or food is undertaken in either Unit 3 or Unit 4, or across both Units 3 and 4. The investigation relates to knowledge and skills developed across Unit 3 and/or Unit 4.

The investigation requires the student to identify an aim, develop a question, formulate a hypothesis and plan a course of action to answer the question and that complies with safety and ethical requirements. The student then undertakes an experiment that involves the collection of primary qualitative and/or quantitative data, analyses and evaluates the data, identifies limitations of data and methods, links experimental results to science ideas, reaches a conclusion in response to the question and suggests further investigations which may be undertaken. Findings are communicated in a scientific poster format according to the template on page 11. A practical logbook must be maintained by the student for record, authentication and assessment purposes.
Physics

Subject Code:  PHY
Previous Years  Materials & Resources Costs – guide only

Unit 1 & 2  $60.00
Unit 3 & 4  $60.00

It is strongly recommended that:

- Students studying Physics should also study Maths Methods
- Students complete Units 1 and 2 before attempting Units 3 and 4

The staged implementation of the new study design saw it being introduced for Units 1 and 2 in 2016, and Units 3 and 4 in 2017. Second hand textbooks may be available for Units 1 and 2 but are not available for Units 3 and 4.

Unit 1

What ideas explain the physical world?
This unit comprise three areas of study.

Area of study 1 – How can thermal effects be explained?
In this area of study students investigate the thermodynamic principles related to heating processes, including concepts of temperature, energy and work. Students examine the environmental impact of Earth’s thermal systems and human activities with reference to the effects on surface materials, the emission of greenhouse gases and the contribution to the enhanced greenhouse effect. They analyse the strengths and limitations of the collection and interpretation of thermal data in order to consider debates related to climate science.

Area of study 2 – How do electric circuits work?
Modelling is a useful tool in developing concepts that explain physical phenomena that cannot be directly observed. In this area of study students develop conceptual models to analyse electrical phenomena and undertake practical investigations of circuit components. Concepts of electrical safety are developed through the study of safety mechanisms and the effect of current on humans. Students apply and critically assess mathematical models during experimental investigations of DC circuits.

Area of study 3 – What is matter and how is it formed?
In this area of study students explore the nature of matter, and consider the origins of atoms, time and space. They examine the currently accepted theory of what constitutes the nucleus, the forces within the nucleus and how energy is derived from the nucleus.
Unit 2

What do experiments reveal about the physical world?

This unit is comprised of three areas of study

Area of study 1 - How can motion be described and explained?

In this area of study students observe motion and explore the effects of balanced and unbalanced forces on motion. They analyse motion using concepts of energy, including energy transfers and transformations, and apply mathematical models during experimental investigations of motion. Students model how the mass of finite objects can be considered to be at a point called the centre of mass. They describe and analyse graphically, numerically and algebraically the motion of an object, using specific physics terminology and conventions.

Area of study 2 – Options

Twelve options are available for selection in Area of Study 2. Each option is based on a different observation of the physical world. One option is to be selected by the student from the following:

- What are stars?
- Is there life beyond Earth’s Solar System?
- How do forces act on the human body?
- How can AC electricity charge a DC device?
- How do heavy things fly?
- How do fusion and fission compare as viable nuclear energy power sources?
- How is radiation used to maintain human health?
- How do particle accelerators work?
- How can human vision be enhanced?
- How do instruments make music?
- How can performance in ball sports be improved?
- How does the human body use electricity?

Area of study 3 – Practical Investigation

Systematic experimentation is an important aspect of physics inquiry. In this area of study students design and conduct a practical investigation related to knowledge and skills developed in Area of Study 1 and/or Area of Study 2. The investigation requires the student to develop a question, plan a course of action that attempts to answer the question, undertake an investigation to collect the appropriate primary qualitative and/or quantitative data, organise and interpret the data, and reach a conclusion in response to the question. The student designs and undertakes an investigation involving two independent variables one of which should be a continuous variable. A practical logbook must be maintained by the student for recording, authentication and assessment purposes.

Unit 3

How do fields explain motion and electricity?

This unit is comprised of three areas of study

Area of study 1 – How do things move without contact?
In this area of study students examine the similarities and differences between three fields: gravitational, electric and magnetic. Field models are used to explain the motion of objects when there is no apparent contact. Students explore how positions in fields determine the potential energy of an object and the force on an object. They investigate how concepts related to field models can be applied to construct motors, maintain satellite orbits and to accelerate particles.

Area of study 2 – How are fields used to move electrical energy?

The production, distribution and use of electricity has had a major impact on human lifestyles. In this area of study students use empirical evidence and models of electric, magnetic and electromagnetic effects to explain how electricity is produced and delivered to homes. They explore magnetic fields and the transformer as critical to the performance of electrical distribution systems.

Area of study 3 – How fast can things go?

In this area of study students use Newton’s laws of motion to analyse relative motion, circular motion and projectile motion. Newton’s laws of motion give important insights into a range of motion both on Earth and beyond. At very high speeds, however, these laws are insufficient to model motion and Einstein’s theory of special relativity provides a better model. Students compare Newton’s and Einstein’s explanations of motion and evaluate the circumstances in which they can be applied. They explore the relationships between force, energy and mass.

Unit 4

How can two contradictory models explain both light and matter?

This unit is comprised of three areas of study

Area of study 1 – How can waves explain the behaviour of light?

In this area of study students use evidence from experiments to explore wave concepts in a variety of applications. Wave theory has been used to describe transfers of energy, and is important in explaining phenomena including reflection, refraction, interference and polarisation. Do waves need a medium in order to propagate and, if so, what is the medium? Students investigate the properties of mechanical waves and examine the evidence suggesting that light is a wave. They apply quantitative models to explore how light changes direction, including reflection, refraction, colour dispersion and polarisation.

Area of study 2 – How are light and matter similar?

In this area of study students explore the design of major experiments that have led to the development of theories to describe the most fundamental aspects of the physical world - light and matter. When light and matter are probed they appear to have remarkable similarities. Light, which was previously described as an electromagnetic wave, appears to exhibit both wave-like and particle-like properties. Findings that electrons behave in a wave-like manner challenged thinking about the relationship between light and matter, where matter had been modelled previously as being made up of particles.

Area of study 3 – Practical Investigation
A student-designed practical investigation related to waves, fields or motion is undertaken either in Unit 3 or Unit 4, or across both Units 3 and 4. The investigation relates to knowledge and skills developed across Units 3 and 4 and is undertaken by the student through practical work. The investigation requires the student to develop a question, formulate a hypothesis and plan a course of action to answer the question and that complies with safety and ethical guidelines. Students then undertake an experiment that involves the collection of primary quantitative data, analyse and evaluate the data, identify limitations of data and methods, link experimental results to science ideas, reach a conclusion in response to the question and suggest further investigations that may be undertaken.
Psychology

Subject Code:  PSY

Previous Years  Materials & Resources Costs – guide only

Unit 1 & 2  $50.00
Unit 3 & 4  $50.00

Unit 1

How are behaviour and mental processes shaped?

This unit is comprised of three areas of study

Area of study 1 – How does the brain function?
Advances in brain research methods have led to new ways of understanding the relationship between the mind, brain and behaviour. In this area of study students examine how our understanding of brain structure and function has changed over time and how the brain enables us to interact with the external world around us. They analyse the roles of specific areas of the brain and the interactions between different areas of the brain that enable complex cognitive tasks to be performed. Students explore how brain plasticity and brain damage can affect a person’s functioning.

Area of study 2 – What influences psychological development?

The psychological development of an individual involves complex interactions between biological, psychological and social factors. In this area of study students explore how these factors influence different aspects of a person’s psychological development. They consider the interactive nature of hereditary and environmental factors and investigate specific factors that may lead to development of typical or atypical psychological development in individuals, including a person’s emotional, cognitive and social development and the development of psychological disorders.

Area of study 3 – Student-directed research investigation

In this area of study students apply and extend their knowledge and skills developed in Areas of Study 1 and/or 2 to investigate a question related to brain function and/or psychological development. Students analyse the scientific evidence that underpins the research in response to a question of interest. They then communicate the findings of their research investigation and explain the psychological concepts, outline contemporary research and present conclusions based on the evidence.

Students may choose a question selected from the list under each topic or they may develop their own research question related to Areas of Study 1 and/or 2 in conjunction with their teacher. For the selected question, students should refer to at least two contemporary psychological studies and/or research techniques.
Unit 2

How do external factors influence behaviour and mental processes?
This unit is comprised of three areas of study

Area of study 1 - What influences a person’s perception of the world?

Human perception of internal and external stimuli is influenced by a variety of biological, psychological and social factors. In this area of study students explore two aspects of human perception – vision and taste – and analyse the relationship between sensation and perception of stimuli. They consider how biological, psychological and social factors can influence a person’s perception of visual and taste stimuli, and explore circumstances where perceptual distortions of vision and taste may occur.

Area of study 2 – How are people influenced to behave in particular ways?

A person’s social cognition and behaviour influence the way they view themselves and the way they relate to others. In this area of study students explore the interplay of biological, psychological and social factors that shape the behaviour of individuals and groups. They consider how these factors can be used to explain the cause and dynamics of particular individual and group behaviours, including attitude formation, prejudice, discrimination, helping behaviour and bullying. Students examine the findings of classical and contemporary research as a way of theorising and explaining individual and group behaviour.

Area of study 3 – Student-directed practical investigation

In this area of study students design and conduct a practical investigation related to external influences on behaviour. The investigation requires the student to develop a question, plan a course of action to answer the question, undertake an investigation to collect the appropriate primary qualitative and/or quantitative data, organise and interpret the data and reach a conclusion in response to the question. The investigation relates to knowledge and skills developed in Areas of Study 1 and/or 2 and is undertaken by the student using either quantitative or qualitative methods, including experiments, surveys, questionnaires, observational studies and/or rating scales.

Unit 3

How does experience affect behaviour and mental processes?
This unit is comprised of two areas of study

Area of study 1 – How does the nervous system enable psychological functioning?

In this area of study, students explore the role of different branches of the nervous system in enabling a person to integrate, coordinate and respond to internal and external sensory stimuli. They explore the specialised structures and functioning of neurons that allow the nervous system to transmit neural information. Students evaluate how biological, psychological and social factors can influence a person’s nervous system functioning. In particular, they consider the ways in which stress can affect the mind and body, the role that the nervous system plays in these processes and how stress can be managed.
Area of study 2 – How do people learn and remember?

Memory and learning are core components of human identity: they connect past experiences to the present and shape futures by enabling adaption to daily changes in the environment. In this area of study students study the neural basis of memory and learning and examine factors that influence the learning of new behaviours and the storage and retention of information in memory. They consider the influence of biological, psychological and social factors on the fallibility of memory.

Unit 4

How is wellbeing developed and maintained?

This unit is comprised of three areas of study

Area of study 1 – How do levels of consciousness affect mental processes and behaviour?
Differences in levels of awareness of sensations, thoughts and surroundings influence individuals’ interactions with their environment and with other people. In this area of study students focus on states of consciousness and the relationship between consciousness and thoughts, feelings and behaviours. They explore the different ways in which consciousness can be studied from physiological and psychological perspectives and how states of consciousness can be altered. Students consider the nature and importance of sleep and apply biological, psychological and social factors to analyse the effects of sleep disturbances on psychological functioning, including mood, cognition and behaviour.

Area of study 2 – What influences mental wellbeing?
In this area of study, students examine what it means to be mentally healthy. They explore the concept of a mental health continuum and factors that explain how location on the continuum for an individual may vary over time. Students apply a biopsychosocial approach to analyse mental health and mental disorder, and evaluate the roles of predisposing, precipitating, perpetuating and protective factors in contributing to a person’s mental state. Specific phobia is used to illustrate how a biopsychosocial approach can be used to explain how biological, psychological and social factors are involved in the development and management of a mental disorder. Students explore the concepts of resilience and coping and investigate the psychological basis of strategies that contribute to mental wellbeing.

Area of study 3 – Practical Investigation
The investigation requires the student to identify an aim, develop a question, formulate a research hypothesis including operationalised variables and plan a course of action to answer the question and that takes into account safety and ethical guidelines. Students then undertake an experiment that involves the collection of primary qualitative and/or quantitative data, analyse and evaluate the data, identify limitations of data and methods, link experimental results to science ideas, reach a conclusion in response to the question and suggest further investigations which may be undertaken. Results are communicated in a scientific poster format. A practical work folio must be maintained by the student for record, authentication and assessment purposes. A student-designed or adapted practical investigation related to mental processes and psychological functioning is undertaken in either Unit 3 or Unit 4, or across both Units 3 and 4. The investigation relates to knowledge and skills developed across Units 3 and 4, and is undertaken by the student using an appropriate experimental research design involving independent groups, matched participants, repeated measures or a cross-sectional study.
Technology Domain

For further information about subjects in the Technology Domain, please contact the Domain Leader: Mr Peter Aitken aitken.peter.d@edumail.vic.gov.au

Subjects offered within the Technology Domain in the VCE area include:
- Product Design & Technology – Textiles
- Product Design & Technology – Wood & Metal
- Food & Technology
- Systems Engineering – Mechanical / Electrical / Electronic

Other subjects which may be useful to students with an interest in the Technology area include a range of VET subjects:
- VET Automotive
- VET Building Construction
- VET Engineering
- VET Hospitality
- VET Information Technology
- VET Interactive Digital Media

Some Career Paths ideas which may be of use
- Automotive Industry
- Building Industry
- Computing
- Electrical
- Engineering
- Food
- Metal Industry
Product Design & Technology – Textiles

For further information about subjects in the Technology Domain, please contact the Domain Leader: Mr Peter Aitken aitken.peter.d@edumail.vic.gov.au

Subject Code: PDT
Previous Years Materials & Resources Costs – guide only
Unit 1 & 2 $65.50
Unit 3 & 4 $65.50

Unit 1

Product re-design and sustainability

This unit focuses on the analysis, modification and improvement of a product design with consideration of the materials used and issues of sustainability. Finite resources and the proliferation of waste require sustainable product design thinking. Many products in use today have been redesigned to suit the changing needs and demands of users but with little consideration of their sustainability.

Knowledge of material use and suitability for particular products is essential in product design. Additionally, knowledge of the source, origin and processing of materials is central to sustainable practices. Students consider the use of materials from a sustainable viewpoint. Sustainable practices claimed to be used by designers are examined.

Area of Study 1 provides an introduction and structured approach towards the Product design process and Product design factors. Students learn about intellectual property (IP), its implications related to product design and the importance of acknowledging the IP rights of the original designer.

In Area of Study 2, students produce a re-designed product safely using tools, equipment, machines and materials, compare it with the original design and evaluate it against the needs and requirements outlined in their design brief. If appropriate, a prototype made of less expensive materials can be presented; however, the specific materials intended for the final product would need to be indicated. A prototype is expected to be of full scale and considered to be the final design of a product before production of multiples.

Unit 2

Collaborative Design

In this unit students work in teams to design and develop an item in a product range or contribute to the design, planning and production of a group product. They focus on factors including: human needs and wants; function, purpose and context for product design; aesthetics; materials and sustainability; and the impact of these factors on a design solution.
Teamwork encourages communication between students and mirrors professional design practice where designers often work within a multi-disciplinary team to develop solutions to design problems. Students also examine the use of ICT to facilitate teams that work collaboratively but are spread across the globe.

In this unit students are able to gain inspiration from an historical and/or a cultural design movement or style and its defining factors such as ideological or technological change, philosophy or aesthetics.

In Area of Study 1, students work both individually and as members of a small design team to address a problem, need or opportunity and consider the associated human-centred design factors. They design a product within a range, based on a theme, or a component of a group product. They research and refer to a chosen style or movement. In Area of Study 2 the product produced individually or collectively is evaluated.

**Unit 3**

**Applying the Product design process**

In this unit students are engaged in the design and development of a product that meets the needs and expectations of a client and/or an end-user, developed through a design process and influenced by a range of complex factors. These factors include the purpose, function and context of the product; human centred design factors; innovation and creativity; visual, tactile and aesthetic factors; sustainability concerns; economic limitations; legal responsibilities; material characteristics and properties; and technology. Design and product development and manufacture occur in a range of settings. An industrial setting provides a marked contrast to that of a ‘one-off situation’ in a small ‘cottage’ industry or a school setting. Although a product design process may differ in complexity or order, it is central to all of these situations regardless of the scale or context. This unit examines different settings and takes students through the Product design process as they design for others.

In the initial stage of the Product design process, a design brief is prepared. It outlines the context or situation around the design problem and describes the needs and requirements in the form of constraints or considerations.

In Area of Study 1, students examine how a design brief is structured, how it addresses particular Product design factors and how evaluation criteria are developed from the constraints and considerations in the brief. They develop an understanding of techniques in using the design brief as a springboard to direct research and design activities.

In Area of Study 2, students examine how a range of factors, including new and emerging technologies, and international and Australian standards, influence the design and development of products within industrial manufacturing settings. They consider issues associated with obsolescence and sustainability models.
In Area of Study 3, students commence the application of the Product design process for a product design for a client and/or an end-user, including writing their own design brief which will be completed and evaluated in Unit 4.

**Unit 4**

*Product development and evaluation*

In this unit students learn that evaluations are made at various points of product design, development and production. In the role of designer, students judge the suitability and viability of design ideas and options referring to the design brief and evaluation criteria in collaboration with a client and/or an end-user. Comparisons between similar products help to judge the success of a product in relation to a range of Product design factors. The environmental, economic and social impact of products throughout their life cycle can be analysed and evaluated with reference to the Product design factors.

In Area of Study 1, students use comparative analysis and evaluation methods to make judgments about commercial product design and development.

In Area of Study 2, students continue to develop and safely manufacture the product designed in Unit 3, Outcome 3, using materials, tools, equipment and machines, and record and monitor the production processes and modifications to the production plan and product.

In Area of Study 3, students evaluate the effectiveness and efficiency of techniques they used and the quality of their product with reference to evaluation criteria and client and/or end-user feedback. Students make judgments about possible improvements. They produce an informative presentation to highlight the product’s features to the client and/or an end-user and explain its care requirement.
Product Design & Technology – Wood / Metal

For further information about subjects in the Technology Domain, please contact the Domain Leader: Mr Peter Aitken aitken.peter.d@edumail.vic.gov.au

Subject Code: PDW

Previous Years Materials & Resources Costs – guide only
Unit 1 & 2 $84.50
Unit 3 & 4 $82.50

This study engages students in technological tasks that call on their knowledge and understanding of materials and production processes to design and make products suitable for their intended purpose. Students also have opportunities to undertake production activities often related to industrial and commercial practices.

Unit 1

Product re-design and sustainability

This unit focuses on the analysis, modification and improvement of a product design with consideration of the materials used and issues of sustainability. Finite resources and the proliferation of waste require sustainable product design thinking. Many products in use today have been redesigned to suit the changing needs and demands of users but with little consideration of their sustainability.

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Food Studies

For further information about subjects in the Technology Domain, please contact the Domain Leader: Mr Peter Aitken aitken.peter.d@edumail.vic.gov.au

Subject Code: FOO

Previous Years Materials & Resources Costs – guide only

<table>
<thead>
<tr>
<th>Unit</th>
<th>Costs</th>
</tr>
</thead>
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<tr>
<td>1 &amp; 2</td>
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</tr>
<tr>
<td>3 &amp; 4</td>
<td>$144.50</td>
</tr>
</tbody>
</table>

If you are interested in a career in the hospitality area or Food Technology area, love cooking, experimenting with food and trying to understand what happens when you prepare food, this subject is for you.

Other costs

Materials Costs: In addition to the booklist, there are also charges for food used during class

Unit 1

**Food around the world**

This unit focuses on food from historical and cultural perspectives. Students investigate the origins and roles of food through time and across the world.

Unit 2

**Food Makers**

In this unit students investigate food systems in contemporary Australia. Area of Study 1 focuses on commercial food production industries, while Area of Study 2 looks at food production in small-scale domestic settings, as both a comparison and complement to commercial production.
Unit 3

Food in Daily Life
This unit investigates the many roles and everyday influences of food. Area of Study 1 explores the science of food: our physical need for it and how it nourishes and sometimes harms our bodies. Area of Study 2 focuses on influences on food choice: how communities, families and individuals change their eating patterns over time and how our food values and behaviours develop within social environments.

Unit 4

Food issues, challenges and futures
In this unit students examine debates about global and Australian food systems. Area of Study 1 focuses on issues about the environment, ecology, ethics, farming practices, the development and application of technologies, and the challenges of food security, food safety, food wastage, and the use and management of water and land. Area of Study 2 focuses on individual responses to food information and misinformation and the development of food knowledge, skills and habits to empower consumers to make discerning food choices.
Systems Engineering

For further information about subjects in the Technology Domain, please contact the Domain. Leader: Mr. Peter Aitken aitken.peter.dl@edumail.vic.gov.au

Mechanical / Electrical / Electronic

**Subject Code:** EEP  
Previous Years Materials & Resources Costs – guide only

- Unit 1 & 2  $105.00
- Unit 3 & 4  $105.00

Students who are interested in a career in Automotive are strongly advised to select VCE Systems Engineering and VCE VET Automotive.

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**Unit 1**

**Introduction to Mechanical Systems**

This unit focuses on mechanical engineering fundamentals as the basis of understanding the underlying principles and the building blocks that operate in the simplest to more complex mechanical devices.

While this unit contains the fundamental physics and theoretical understanding of mechanical systems and how they work, the main focus is on the construction of a system. The construction process draws heavily upon design and innovation within all the interrelated applied learning activities.

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**Unit 2**

**Introduction to Electrotechnology Systems**

This unit focuses on building understanding of the fundamental principles of electrical and electronic circuits, collectively and commonly referred to as Electrotechnology.

In this unit students study fundamental Electrotechnology engineering principles. Through the application of their knowledge students produce basic operational systems. The systems produced by the students should employ a level of integration between mechanical and electronic components. Students also apply their knowledge and skills to research and produce technical reports.
Unit 3

Integrated systems engineering and energy

In this unit students study engineering principles that are used to explain integrated systems and how they work.

Students commence work on the design, planning and construction of a controlled integrated system. This project has a strong emphasis on designing, manufacturing, testing and innovation.

Students learn about sources and types of energy that enable technological systems to function. Comparisons are made between the impacts of the use of renewable and non-renewable energy sources.

Unit 4

System control and new and emerging technologies

In this unit students complete production work and test and evaluate the integrated controlled system they designed in unit 3. Students investigate new and emerging technologies, consider reasons for their development and analyse their impact.

Students use risk management methods through the construction of the system and use a range of materials, tools, equipment, and components. In the final stages of the Systems Engineering Process, students test, diagnose and analyse the performance of the system. They also evaluate their planning and construction.

Students expand their knowledge of new and emerging developments and innovations through their investigation and analysis of engineering systems. They analyse a specific new or emerging innovation, including its impacts.
Vocational Education and Training (VET)

For further information about subjects in VET, please contact the Domain Leader: Mrs Anne Puckey puckey.yvonne.a@edumail.vic.gov.au

VCE VET programs are vocational training programs approved by the VCAA for recognition as a VCE subject. Students undertaking a VCE VET program have the opportunity to receive both a VCE certificate and a nationally recognized vocational qualification.

Kyabram P-12 College, as well as being a government secondary college, is also a Registered Training Organisation (RTO number 22264). This means that it is registered to deliver Nationally Recognised vocational education and training. Further information about the College’s RTO policies and procedures (such as the Parent Payment Policy, Refund Policy, Complaints and Appeals Policy and Procedure, Enrolment Procedure, Issuing of Certificates and Statements of Attainment Policy, Certificate Reprint Policy, RPL Policy and Procedure, Privacy Notice and other policies and procedures) can be found in the VET Student Handbook on the College’s website. For further information about our scope of delivery, go to www.training.gov.au.

The following table provides a summary of the VCE VET programs currently on offer to students at Kyabram P-12 College. Some programs are delivered by Kyabram P-12 College’s RTO, others are delivered by external TAFEs and RTOs. Some of these VCE VET programs offer scored assessment to generate a study score, which contributes to a student’s ATAR. Those that don’t have scored assessment may still contribute 10% to a student’s ATAR. These programs are indicated below:

<table>
<thead>
<tr>
<th>VCE / VET Program offered at Kyabram P-12</th>
<th>Certificate code and title</th>
<th>Study score available</th>
<th>Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Studies</td>
<td>ACM20110Certificate II in Animal Studies</td>
<td>No</td>
<td>Goulburn Ovens Institute of TAFE</td>
</tr>
<tr>
<td>Automotive</td>
<td>22015VIC Certificate II in Automotive Technology Studies (pre-vocational)</td>
<td>No</td>
<td>Kyabram P-12 College</td>
</tr>
<tr>
<td>Agriculture</td>
<td>AHC20110 Certificate II in Agriculture</td>
<td>No</td>
<td>Goulburn Ovens Institute of TAFE</td>
</tr>
<tr>
<td>Building and Construction</td>
<td>22216VIC Certificate II in Building and Construction (pre-apprenticeship) (partial completion)</td>
<td>No</td>
<td>Kyabram P-12 College</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
<td>Yes/No</td>
<td>Institution</td>
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</tr>
<tr>
<td>Community Services</td>
<td>CHC20108 Certificate II in Community Services and selected units of competence from Certificate III in Community Services Work and Certificate III in Children’s Services</td>
<td>Yes</td>
<td>Goulburn Ovens TAFE</td>
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<tr>
<td>Electrical</td>
<td>22261VIC Certificate II in Electrotechnology Studies (pre-vocational)</td>
<td>No</td>
<td>Goulburn Ovens TAFE</td>
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<tr>
<td>Engineering</td>
<td>22209VIC Certificate II in Engineering Studies</td>
<td>Yes</td>
<td>Kyabram P-12 College</td>
</tr>
<tr>
<td>Equine Industry</td>
<td>21908VIC Certificate II in Equine Industry</td>
<td>Yes</td>
<td>Goulburn Ovens Institute of TAFE</td>
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<tr>
<td>Furniture Making</td>
<td>MSF20313 Certificate II in Furniture Making</td>
<td>Yes</td>
<td>Goulburn Ovens Institute of TAFE</td>
</tr>
<tr>
<td>Health</td>
<td>HLT21212 Certificate II in Health Support Services</td>
<td>No</td>
<td>Goulburn Ovens Institute of TAFE</td>
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<tr>
<td>Hospitality</td>
<td>SIT20207 Certificate II in Hospitality and selected units of competence from Certificate III</td>
<td>Yes</td>
<td>Goulburn Ovens Institute of TAFE</td>
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<tr>
<td>Information Technology</td>
<td>ICA30111 Certificate III in Information, Digital Media and Technology (partial completion)</td>
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<td>Kyabram P-12 College</td>
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<tr>
<td>Interactive Digital Media</td>
<td>CUF30107 Certificate III in Media</td>
<td>Yes</td>
<td>Goulburn Ovens TAFE</td>
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<tr>
<td>Music</td>
<td>CUS30209 Certificate III in Technical Production</td>
<td>Yes</td>
<td>College of Sound and Music Production</td>
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<tr>
<td>Sport &amp; Recreation</td>
<td>SIS20313 Certificate II in Sport and Recreation</td>
<td>Yes</td>
<td>Goulburn Ovens TAFE</td>
</tr>
</tbody>
</table>
There are several other National Training Certificates offered to students at Kyabram P-12 College, these VET or FE (Further Education) programs, outside the suite of VCAA designed programs, may offer Block Credit Recognition towards the VCE and nominal hour credit towards the VCAL. Further information about Block Credit Recognition can be found on the VCAA website. These certificates include:

- WRB301004 – Certificate III in Beauty Services – Goulburn Ovens TAFE
- WRH20109 – Certificate II in Hairdressing – Goulburn Ovens TAFE
- 22304VIC – Certificate II in Plumbing – Goulburn Ovens TAFE

If there are other areas which may be of interest to you, please see Mrs Anne Puckey at the Secondary Campus.

**Certificate II in Animal Studies**

**Course Code ACM20110**

**Subject Code:** VAS

Previous Years Materials & Resources Costs – guide only

<table>
<thead>
<tr>
<th>Unit</th>
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<tbody>
<tr>
<td>1 &amp; 2</td>
<td>$100.00</td>
</tr>
<tr>
<td>3 &amp; 4</td>
<td>$100.00</td>
</tr>
</tbody>
</table>

This course is perfect if you are wanting to learn about working with animals whilst you are still at school. This online course is designed for inclusion in a VET in Schools Program, to contribute towards VCE/VCAL programs and a 10% contribution towards ATAR. It can also be undertaken as a School-based Apprentice-Traineeship.

This qualification is a general prevocational qualification aimed for inclusion in a VET in Schools program or as an entry point into the animal care and management industry. It is highly recommended that whilst undertaking this qualification you should seek to gain a period of work placement or work experience in an animal care environment and/or workplace.

**Provider:**
Delivered by Goulburn Ovens TAFE as an on-line subject.
VCE VET Automotive

22015VIC Certificate II in Automotive Studies (prevocational)

Subject Code: VAU

Previous Years Materials & Resources Costs – guide only

<table>
<thead>
<tr>
<th>Unit</th>
<th>Cost</th>
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<tr>
<td>3 &amp; 4</td>
<td>$200.00</td>
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Provider:

Kyabram P-12 College  RTO: 22264

Delivered within the Kyabram P-12 College timetable.

VCE Credit:

Students who complete 22015VIC Certificate II in Automotive Studies (pre-vocational) will be eligible for four units credit towards their VCE: two units at Units 1 and 2, and a Units 3 and 4 sequence.

Description

The Certificate II in Automotive Studies (Prevocational) consists of:

- two core units of competence
- elective units of competence

It is undertaken over a two year period. On successful completion of this program students are eligible for the award of 22015VIC Certificate II in Automotive Studies (Prevocational).

### 22015VIC Certificate II in Automotive Studies (Prevocational)

<table>
<thead>
<tr>
<th>Units 1 and 2</th>
</tr>
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<tbody>
<tr>
<td><strong>Core</strong></td>
</tr>
<tr>
<td>Code</td>
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<tr>
<td>VBN644</td>
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<tr>
<td>AURC270103A</td>
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<tr>
<td><strong>Stream specific modules</strong></td>
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<tr>
<td><strong>MAINTENANCE</strong></td>
</tr>
<tr>
<td>VPAU209</td>
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<tr>
<td><strong>AUTOMOTIVE MECHANICAL</strong></td>
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<tr>
<td>VBN666</td>
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<tr>
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<tr>
<td>VBN692</td>
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</tr>
<tr>
<td>VBN662</td>
</tr>
<tr>
<td>VBN665</td>
</tr>
</tbody>
</table>

### Units 3 and 4

#### MAINTENANCE
- VBN646: Set up and use welding equipment

#### AUTOMOTIVE MECHANICAL
- VBN648: Remove and replace engine assembly (conventional)
- VBN652: Dismantle and assemble engine, four stroke multi cylinder (petrol)
- VBN658: Remove and replace transmission, manual (conventional)
- VBN659: Dismantle and assemble transmission, manual (conventional)
- VBN662: Remove and replace clutch assembly
- VBN665: Remove and replace brake assemblies

### Career opportunities:

The two year program of Certificate II in Automotive Technology Studies provides students with a broad base of skills necessary to maintain and service a wide range of motor vehicles. This solid grounding in the principles of automotive maintenance and repair will give you a head start in gaining an automotive apprenticeship.

Automotive apprenticeships are available in four industry specific strands. These are electrical, mechanical, mechanics and vehicle body. Each strand has individual occupational streams and their own specialist qualifications. For example, mechanical – diesel fitter, heavy vehicle road transport, motorcycle.

### ATAR Contribution

Students who receive a Units 3 and 4 sequence for 22015VIC Certificate II in Automotive Studies (pre-vocational) will be eligible for a 10% increment towards their ATAR (10% of the average of the primary four scaled studies).

### Work Placement

This program includes the opportunity for work placement (Structured Workplace Learning- SWL)

### Related Subjects you could include in your course:
- Product Design and Technology
- Systems Engineering – Mechanical / Electrical / Electronic
- Industry and Enterprise
- Mathematics
Useful Links


VCE VET Agriculture

AHC20110 Certificate II in Agriculture

Subject Code: VAG

Previous Years Materials & Resources – guide only

Unit 1 & 2  $75.00

Unit 3 & 4  $75.00

Provider:

Goulburn Ovens TAFE

Certificate II in Agriculture provides students with the knowledge and skills that will enhance their employment prospects in the agriculture industry. Knowledge and skills are developed in harvesting, maintaining livestock feed and water supplies, mustering, moving and penning up livestock, and performing routine farm machinery maintenance. Employment opportunities exist in a number of designated sectors such as beef, dairy, sheep and wool production.

ATAR Contribution

Students who receive a Units 3 and 4 sequence for VCE VET Agriculture, will be eligible for an increment towards their ATAR (10% of the average of the primary four scaled studies).

Students who receive a Units 3 and 4 sequence for any of the approved school-based apprenticeship and traineeship qualifications from the Agriculture industry area will be eligible for an increment towards their ATAR (10% of the average of the primary four scaled studies).

The increment is awarded by the Victorian Tertiary Admissions Centre (VTAC). Further information can be found on the VTAC website: www.vtac.edu.au

Delivered at Goulburn Ovens TAFE on Wednesdays.

Bus leaves Kyabram Transit Centre at 7.10 am and returns at 5.30 pm.
VCE VET Building and Construction

22216VIC Certificate II in Building and Construction -
(Bricklaying, Carpentry, Painting and Decorating, Wall and Ceiling Lining, Wall and Floor Tiling, Solid Plastering and Stonemasonry) Preapprenticeship (Partial completion)

Subject Code: VBC
Previous Year’s Materials & Resources Costs – guide only
- Unit 1 & 2 $200.00
- Unit 3 & 4 $200.00

Provider:
Kyabram P-12 College RTO: 22264
This course is delivered within the Kyabram P-12 College timetable.

VCE Credit:
Up to four units: Two units at Units 1 and 2, and a Units 3 and 4 sequence.

Description
The Carpentry stream of this pre-apprenticeship program is offered at Kyabram P-12 College. It consists of thirteen core modules and eleven Carpentry specific modules. On completion of this program, students will have gained partial completion of the 22216VIC Certificate II in Building and Construction (Bricklaying, Carpentry, Painting and Decorating, Wall and Ceiling and Lining, Wall and Floor Tiling, Solid Plastering and Stonemasonry) Pre-apprenticeship.
## VCE VET Units 1 & 2

<table>
<thead>
<tr>
<th>Code</th>
<th>Unit of competence</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPCCOHS1001A</td>
<td>Work safely in the construction industry</td>
<td></td>
</tr>
<tr>
<td>VU20955</td>
<td>Workplace safety and site induction</td>
<td>CPCCOHS1001A</td>
</tr>
<tr>
<td>HLTFA211A</td>
<td>Provide basic emergency life support</td>
<td></td>
</tr>
<tr>
<td>VU20956</td>
<td>Building structures</td>
<td></td>
</tr>
<tr>
<td>VU20957</td>
<td>Calculations for the construction industry</td>
<td></td>
</tr>
<tr>
<td>VU20960</td>
<td>Introduction to scaffolding and working platforms</td>
<td>CPCCOHS1001A</td>
</tr>
<tr>
<td>VU20961</td>
<td>Levelling</td>
<td>CPCCOHS1001A</td>
</tr>
<tr>
<td>VU20962</td>
<td>Quality principles for the building industry</td>
<td></td>
</tr>
<tr>
<td>VU20963</td>
<td>Safe handling and use of plant and selected portable power tools</td>
<td>CPCCOHS1001A</td>
</tr>
<tr>
<td>VU20964</td>
<td>Workplace documents and plans</td>
<td></td>
</tr>
</tbody>
</table>

## VCE VET Units 3 & 4

<table>
<thead>
<tr>
<th>Code</th>
<th>Unit of competence</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>VU20971</td>
<td>Carpentry hand tools</td>
<td>CPCCOHS1001A</td>
</tr>
<tr>
<td>VU20973</td>
<td>Basic setting out</td>
<td>CPCCOHS1001A</td>
</tr>
<tr>
<td>VU20974</td>
<td>Sub-floor framing</td>
<td>CPCCOHS1001A</td>
</tr>
<tr>
<td>VU20975</td>
<td>Wall framing</td>
<td>CPCCOHS1001A</td>
</tr>
<tr>
<td>VU20976</td>
<td>Roof framing</td>
<td>CPCCOHS1001A</td>
</tr>
<tr>
<td>VU20977</td>
<td>External cladding</td>
<td>CPCCOHS1001A</td>
</tr>
<tr>
<td>VU20978</td>
<td>Installation of window and door frames</td>
<td>CPCCOHS1001A</td>
</tr>
<tr>
<td>VU20980</td>
<td>Introduction to demolition</td>
<td>CPCCOHS1001A</td>
</tr>
</tbody>
</table>

**Career opportunities:**
Upon successful completion the training undertaken may give you a head start to gaining an apprenticeship in the Building and Construction industry.

Trade qualifications are available, through apprenticeship, in General Construction: Painting andDecorating, Bricklaying/Blocklaying or Carpentry – Framework/Formwork/Finishing and this pre-apprenticeship course could be recognised as partial completion within these courses.

**ATAR Contribution**
Students who receive a Units 3 and 4 sequence for the VCE VET Building and Construction program will be eligible for a 10% increment towards their ATAR (10% of the average of the primary four scaled studies).
Work Placement
This program provides the opportunity to complete Work Placement (Structured Workplace Learning - SWL).

Related Subjects you could include in your course:
- Product Design and Technology
- Industry and Enterprise
- Mathematics
- Visual Communication and Design

Useful Links
VCE VET Community Services

**CHC20108 – Certificate II in Community Services**
(and selected units from Certificate III in Community Services Work and Certificate III in Children’s services)

**Subject Code:** VCS

Previous Years Materials & Resources Costs – guide only

- Unit 1 & 2: $170.00
- Unit 3 & 4: $50.00

**Provider:**
Goulburn Ovens TAFE
Bus leaves Kyabram Transit Centre at 7.10 am and returns at 5.30 pm.

**VCE Credit:**
Students who complete the CHC20108 Certificate II in Community Services and selected units of competence from CHC30108 Certificate III in Community Services Work and CHC30708 Certificate III in Children’s Services are eligible for credit of up to five VCE VET units on their VCE Statement of Results: up to three units at Units 1 and 2 (depending on the electives chosen) and two units at Units 3 and 4.

**Description**
Students will learn about the community services sector and explore specific contexts of work. They will develop skills in communication, information provision and processing, administration support, networking and group support. The VCE VET Units 1 and 2 core units of competence include first aid, occupational health and safety, communication and preparing for work in the community sector. Elective units include ensuring children’s health and safety, identifying and addressing specific client needs and working with people with a disability. The VCE VET Units 3 and 4 sequence include working effectively with young people and operating under a casework framework.

**Career opportunities:**
Certificate II in Community Services can provide pathways into work or further study in community services, in areas such as child care, home and community care, drug and alcohol work, disability work, social housing or mental health work. With additional training and experience, future employment opportunities may include a community health worker, counsellor, out of hours carer, school support worker, case manager.
ATAR Contribution

Students wishing to receive an ATAR contribution for the Units 3 and 4 sequence of VCE VET Community Services must undertake scored assessment for the purpose of achieving a study score. This study score can contribute directly to the primary four or as a fifth or sixth study.

Students who receive a Units 3 and 4 sequence for a School Based Apprenticeship and Traineeship program in Community Services may choose to undertake scored assessment or may choose to opt-out and receive a 10% increment towards their ATAR (10% of the average of the primary four scaled studies).

Work Placement

This program includes a work placement (Structured Workplace Learning- SWL)

Related Subjects you could include in your course:

- Psychology
- Health and Human Development.

Useful Links

VCE VET Electrical Industry

22261VIC Certificate II in Electrotechnology Studies (pre-vocational)

Subject Code: VEE
Previous Years Materials & Resources – guide only

<table>
<thead>
<tr>
<th>Unit</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 &amp; 2</td>
<td>$300.00</td>
</tr>
<tr>
<td>3 &amp; 4</td>
<td>$150.00</td>
</tr>
</tbody>
</table>

Provider:
Goulburn Ovens TAFE
Bus leaves Kyabram Transit Centre at 7.10 am and returns at 5.30 pm.

Certificate II in Electrotechnology Studies (Prevocational) is state accredited curriculum that offers students the opportunity to develop their skills and knowledge across a range of electrical sectors, including electrical, electronics, refrigeration and mechanical engineering.

ATAR Contribution

Students who receive a Units 3 and 4 sequence for VCE VET Electrical Industry will be eligible for an increment towards their ATAR (10% of the average of the primary four scaled studies).

The increment is awarded by the Victorian Tertiary Admissions Centre (VTAC). Further information can be found on the VTAC website: www.vtac.edu.au

The VCE VET Electrical Industry program does not offer scored assessment.
**VCE VET Engineering**

22209VIC – Certificate II in Engineering Studies

**Subject Code:** VEN

Previous Year’s Materials & Resources Costs – guide only

- Unit 1 & 2 $200.00
- Unit 3 & 4 $200.00

**Provider:**
Kyabram P-12 College RTO: 22264

This course is delivered within the Kyabram P-12 College timetable.

**VCE Credit:**
Students who complete the two year program, 22209VIC Certificate II in Engineering Studies, are eligible for four units credit towards their VCE: Two units at Units 1 and 2 and a Units 3 and 4 sequence.

**Description**
Certificate II in Engineering Studies provides students with the practical skills and theoretical knowledge to undertake an apprenticeship in the engineering trades. The two year program consists of a total of 14 Units of Competence: 11 core units and three elective units.
**Program structure:**

**22209VIC CERTIFICATE II IN ENGINEERING STUDIES**

<table>
<thead>
<tr>
<th>Units 1 and 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core units</strong></td>
<td></td>
</tr>
<tr>
<td>MEM13014A</td>
<td>Apply principles of occupational health and safety in work environment</td>
</tr>
<tr>
<td>MEM16006A</td>
<td>Organise and communicate information</td>
</tr>
<tr>
<td>MEM16008A</td>
<td>Interact with computing technology</td>
</tr>
<tr>
<td>MEM18001C</td>
<td>Use hand tools</td>
</tr>
<tr>
<td>MEM18002B</td>
<td>Use power tools/hand held operations</td>
</tr>
<tr>
<td>VU20909</td>
<td>Develop an individual career plan for the engineering industry</td>
</tr>
<tr>
<td><strong>Elective units</strong></td>
<td></td>
</tr>
<tr>
<td>VU20912</td>
<td>Perform basic machining processes</td>
</tr>
<tr>
<td>VU20913</td>
<td>Apply basic fabrication techniques</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Units 3 and 4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core modules</strong></td>
<td></td>
</tr>
<tr>
<td>MEM12024A</td>
<td>Perform computations</td>
</tr>
<tr>
<td>MSAENV272B</td>
<td>Participate in environmentally sustainable work practices</td>
</tr>
<tr>
<td>VU20910</td>
<td>Produce basic engineering sketches and drawings</td>
</tr>
<tr>
<td>VU20911</td>
<td>Handle engineering materials</td>
</tr>
<tr>
<td>MSS402040A</td>
<td>Apply 5S procedures</td>
</tr>
<tr>
<td><strong>Elective units</strong></td>
<td></td>
</tr>
<tr>
<td>VU20903</td>
<td>Produce basic engineering components and products using fabrication or machining</td>
</tr>
</tbody>
</table>

**Career opportunities:**

Certificate II in Engineering Studies prepares students for an engineering apprenticeship which, upon completion, can lead into a range of careers in the engineering and manufacturing industries. These include roles in conception, design, manufacture, assembly, installation, repair, replacement, packaging and sales of a wide range of products. As a qualified tradesperson occupations may include: boiler maker, welder, tool/die maker, hydraulics/avionics/mechanical technician, draftsperson, mechanical fitter.

**ATAR Contribution**

Students wishing to receive an ATAR contribution for the Units 3 and 4 sequence of VCE VET Engineering Studies must undertake scored assessment for the purpose of achieving a study score. This study score can contribute directly to the primary four or as a fifth or sixth study.

**Work Placement**

This program includes the possibility to complete work placement (Structured Workplace Learning- SWL). It is strongly recommended that students undertake a minimum of 80 hours structured workplace learning. It is a key feature of the course and aspects of training in the workplace can contribute to assessment. Students are able to practise skills gained in a ‘real work situation’ and put into practice the social skills necessary to be an effective member of an engineering team.

**Useful Links**

VCE VET Equine Industry

21908VIC – Certificate II in Equine Industry

Subject Code: VEI

Previous Years Materials & Resources Costs – guide only

<table>
<thead>
<tr>
<th>Unit</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 &amp; 2</td>
<td>$760.00</td>
</tr>
<tr>
<td>(includes 1 day camp, uniform, a polo top, textbook, specialist facilities)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 &amp; 4</td>
<td>$760.00</td>
</tr>
<tr>
<td>(includes 1 day camp, uniform, a polo top, textbook, specialist facilities)</td>
<td></td>
</tr>
</tbody>
</table>

Provider:

G.O. TAFE – Wangaratta – as flexible delivery

The certificate is completed by flexible delivery using ‘on-line’ and practical classes organised by the National Centre for Equine Education.

There are other requirements such as field trips, a 4 day residential camp ($240) and work experience to be completed with this course. Please see Mrs Anne Puckey for further information.

VCE Credit:

Students who complete Certificate II in Equine Industry will be eligible for five units credit towards their VCE: three units at Units 1 and 2 level, and a Units 3 and 4 sequence.

Description

The VCE VET Units 1 and 2 core units of competence include working in an equine organisation, handling horses safely, basic emergency life support and daily care for horses. Elective units may include horse riding and driving, assisting in horse preparation for competition, fencing, retail office procedures, assisting in the conduct of an equine industry event, caring for mares and foals, providing advice on equine products and the selection and fitting of equine equipment, gear and clothing.

The VCE VET Unit 3 and 4 sequence incorporates core units including carry out horse observation, responding to equine injury and disease, equine anatomy and physiology and determining nutritional requirements for standardbreds or thoroughbreds.

Career opportunities:

The VCE VET Equine Industry program provides an overview of the horse industry. Training undertaken through this qualification can lead to jobs as animal attendants, stable or stud hands, coaches and horse breeders, and industry areas such as racing, veterinary nursing and retail.
**ATAR Contribution**

Students wishing to receive an ATAR contribution for the Units 3 and 4 sequence of VCE VET Equine Industry must undertake scored assessment for the purpose of achieving a study score. This study score can contribute directly to the ATAR, either as one of the student's best four studies (the primary four) or as a fifth or sixth study.

**Work Placement**

There is no work placement mandatory for this subject.

**Useful Links**


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**VCE VET Furnishing**

**Subject Code:** VEF

Previous Years Materials & Resources – guide only

- Unit 1 & 2  
  $320.00
- Unit 3 & 4  
  $320.00

**Provider:**

Goulburn Ovens TAFE

Bus leaves Kyabram Transit Centre at 7.10 am and returns at 5.30 pm.

The VCE VET Furnishing program is drawn from a national training package and offers portable qualifications which are recognised throughout Australia. These qualifications prepare students for further training or work in a range of furnishing industries, such as cabinet making, wood machining, polishing, upholstery and picture framing.

**Qualification**

The following qualification is available in the VCE VET Furnishing program:

- MSF20313 Certificate II in Furniture Making. This includes selected units of competency from MSF30213 Certificate III in Furniture Making
**ATAR Contribution**

Students wishing to receive an ATAR contribution for the Units 3 and 4 sequence of VCE VET Furnishing must undertake scored assessment for the purpose of achieving a study score. This study score can contribute directly to the ATAR, either as one of the student's best four studies (the primary four) or as a fifth or sixth study.

Where a student elects not to receive a study score for VCE VET Furnishing, no contribution to the ATAR will be available.

**VCE VET Health**

**Subject Code: VHE**

Previous Years Materials & Resources – guide only

<table>
<thead>
<tr>
<th>Unit 1 &amp; 2</th>
<th>$210.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 3 &amp; 4</td>
<td>$130.00</td>
</tr>
</tbody>
</table>

**Provider:**
Goulburn Ovens TAFE
Bus leaves Kyabram Transit Centre at 7.10 am and returns at 5.30 pm.

The VCE VET Health program is drawn from a national training package and offers portable qualifications which are recognized throughout Australia. These qualifications provide students with the skills and knowledge required to pursue further training or work in an entry-level role within a range of health related areas.

**HLT21212 Certificate II in Health Support Services**
Certificate II in Health Support Services provides students with the knowledge and skills to enhance their employment prospects in the Health industry. This is an entry level qualification which covers workers who provide support for the effective functioning of health services.

**ATAR Contribution**

Students who receive a Units 3 and 4 sequence for the VCE VET Health program in 2016 will be eligible for an increment towards their ATAR (10% of the average of the primary four scaled studies).
The increment is awarded by the Victorian Tertiary Admissions Centre (VTAC). Further information can be found on the VTAC website: www.vtac.edu.au

VCE VET Health does not currently offer scored assessment but will do so from 2018.

**Structured workplace learning**

The VCAA mandates a minimum of 40 hours of structured workplace learning (SWL) placement per year, but strongly recommends that students undertake 80 hours of placement per year for the VCE VET Health program.

The HLT training package mandates placement for some units of competency and qualifications. Placement duration and/or conditions may be stipulated to gain competency for a unit or to complete the qualification. Where placement is not undertaken, and is required as part of the assessment requirements, competency cannot be deemed.
VCE VET Hospitality

SIT20207 – Certificate II in Hospitality (Kitchen Operations)

Subject Code: VHO

Previous Years Materials & Resources Costs – guide only

<table>
<thead>
<tr>
<th>Unit</th>
<th>Cost</th>
</tr>
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<tbody>
<tr>
<td>1 &amp; 2</td>
<td>$380.00</td>
</tr>
<tr>
<td>3 &amp; 4</td>
<td>$200.00</td>
</tr>
</tbody>
</table>

Provider:
G.O. TAFE – Shepparton
Bus leaves Kyabram Transit Centre at 7.10 am and returns at 5.30 pm.

VCE Credit:

Students who complete SIT20307 Certificate II in Hospitality (Kitchen Operations) will be eligible for up to four units of credit towards their VCE: two at Units 1 and 2 level and a Units 3 and 4 sequence.

Description

For Certificate II in Hospitality: The VCE VET Units 1 and 2 core units of competence include health, safety and security procedures, workplace hygiene, developing and updating hospitality industry knowledge, serving food and beverage to customers and organising and preparing food. Elective units include providing visitor information, quality customer service, cleaning premises and equipment, receiving and storing stock and point-of-sale handling procedures.

The VCE VET Units 3 and 4 sequence incorporates core units such as providing food and beverage service, preparing and serving non-alcoholic beverages, responsible service of alcohol and preparing and serving espresso coffee.

Career opportunities:

The VCE VET Hospitality may provide employment opportunities in a variety of roles including food and beverage attendant, bar/bottle shop attendant, front office/receptionist, catering assistant, kitchen hand, cook’s assistant or short order cook.

ATAR Contribution

Students wishing to receive a study score or an ATAR contribution for the Units 3 and 4 sequence VCE VET Hospitality must undertake scored assessment for the purpose of achieving a study score. This study score can contribute directly to the ATAR, either as one of the student’s best four studies (the primary four) or as a fifth or sixth study.
Work Placement

There is no work placement mandatory for this subject.

Related Subjects you could include in your course:


Useful Links

VCE VET Information Technology

ICA30111 Certificate III in Information, Digital Media and Technology (Partial completion)

Subject Code: VIT
Previous Years Materials & Resources Costs – guide only

Unit 1 & 2 $150.00
Unit 3 & 4 $150.00

Provider:
Kyabram P-12 College RTO: 22264

This is delivered on a Wednesday 10am to 3.20pm at Kyabram P-12 College.

VCE Credit:
This course is eligible to receive a Study Score.

Students who undertake the VCE VET program of ICA30111 Certificate III in Information, Digital Media and Technology (Partial Completion) will be eligible for up to four units of credit towards satisfactory completion of their VCE: two units at Units 1 and 2, and a Units 3 and 4 sequence. Students who undertake further training at another institution to complete the Certificate III qualification, may be eligible for further credit at the Units 3 and 4 level.

Description
ICA30111 Certificate III in Information, Digital Media and Technology (partial completion) provides students with the skills and knowledge to become competent in introductory ICT technical functions. The qualification is designed to support information activities in the workplace and to achieve a degree of self-sufficiency as an advanced ICT user.
PROGRAM 2: ICA30111 – Certificate III in Information, Digital Media and Technology (partial completion)

### Units 1 and 2

<table>
<thead>
<tr>
<th>Core units</th>
<th>Unit of competence title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSBOHS302B</td>
<td>Participate effectively in OHS communication and consultative process</td>
</tr>
<tr>
<td>ICAICT202A</td>
<td>Work and communicate effectively in an IT environment</td>
</tr>
<tr>
<td>ICASAS301A</td>
<td>Run standard diagnostic tests</td>
</tr>
</tbody>
</table>

**Elective – Applications**

<table>
<thead>
<tr>
<th>Elective – Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICAICT203A</td>
</tr>
</tbody>
</table>

**Units 3 and 4**

<table>
<thead>
<tr>
<th>Core units</th>
<th>Unit of competence title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICAICT301A</td>
<td>Create user documentation</td>
</tr>
<tr>
<td>ICAICT302A</td>
<td>Install and optimise operating system software</td>
</tr>
<tr>
<td>BSBUS301A</td>
<td>Implement and monitor environmentally sustainable work practices</td>
</tr>
<tr>
<td>ICASAS305A</td>
<td>Provide advice to clients</td>
</tr>
<tr>
<td>ICASAS306A</td>
<td>Maintain equipment and software</td>
</tr>
</tbody>
</table>

**Elective**

<table>
<thead>
<tr>
<th>Elective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICAICT307A</td>
</tr>
</tbody>
</table>

### Career opportunities:
Areas for employment may include technical support, network administration, web technologies, software applications and digital media technologies. Potential occupations may include help-desk officer, ICT operations/user support or PC support officer.

### ATAR Contribution
Students wishing to receive an ATAR contribution for the Units 3 and 4 sequence of VCE VET Information Technology must undertake scored assessment for the purpose of achieving a study score. This study score can contribute directly to the primary four or as a fifth or sixth study.

### Work Placement
The opportunity exists to complete Work Placement for this course, however, it is not mandatory.

### Related Subjects you could include in your course:

### Useful Links
VCE VET Interactive Digital Media

CUF30107 – Certificate III in Media

Subject Code: VID

Previous Years Materials & Resources Costs – guide only

Unit 1 & 2 $70.00
Unit 3 & 4 $70.00

Provider:
Goulburn Ovens TAFE
Bus leaves Kyabram Transit Centre at 7.10 am and returns at 5.30 pm.

VCE Credit:
Students who complete CUF30107 Certificate III in Media will be eligible for up to four units of credit at Units 1 and 2 level and a Units 3 and 4 sequence.

Description
Certificate III in Media Units 1 and 2 core units include participating in occupational health and safety processes, producing and preparing photo images, working effectively in the screen and media industries. Electives may include creating 3D digital models, preparing audio assets, following a design process and producing drawings to represent and communicate the concept.

The VCE VET Unit 3 and 4 sequence incorporates core units in preparing video assets, exploring and applying the creative design process to 2D forms, creating visual design component and authoring interactive sequences.

Career opportunities:
The Certificate II in Creative Industries (Media) and Certificate III in Media can provide pathways into job roles such as community radio or television production assistant, editing assistant and interactive media author assistant.

ATAR Contribution
Students wishing to receive a study score or an ATAR contribution for VCE VET Interactive Digital Media must undertake scored assessment. This consists of three coursework tasks, worth 66% of the overall study score and an end of year examination, worth 34% of the overall study score.
Scored assessment is based on the Units 3 and 4 sequence of the Certificate III in Media (CUF30107).
Work Placement

Work placement is not mandatory for this subject.

Related Subjects you could include in your course:

- VET Information Technology, Studio Arts, Industry & Enterprise, Product Design & Technology, Visual Communication & Design, Drama

Useful Links

VCE VET Music Technical Production

CUS30209 – Certificate III in Music Technical Production

Subject Code: VMU

Previous Years Materials & Resources Costs – guide only

<table>
<thead>
<tr>
<th>Unit</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 &amp; 2</td>
<td>$100.00</td>
</tr>
<tr>
<td>3 &amp; 4</td>
<td>$100.00</td>
</tr>
</tbody>
</table>

Provider:
College of Sound and Music Production

This course is delivered within the Kyabram P-12 College timetable

VCE Credit:
CU30209 Certificate III in Technical Production: will be eligible for up to five units credit towards their VCE: up to three at Units 1 and 2, and a Units 3 and 4 sequence.

Description
The VCE VET Units 1 and 2 core units of competence include developing and updating music industry knowledge and following health, safety and security procedures. Elective units include laying sound tracks, installing, aligning and testing sound equipment and planning a career in music.

The VCE VET Music Industry Units 3 and 4 sequence incorporates units such as operating a sound mixing console and editing sound using digital systems.

Career opportunities:
The Certificate III in Music incorporates industry elements such as performance, critical listening, music management and music promotions. The Certificate III in Music (Technical Production) incorporates industry elements such as sound track laying, digital editing and mixing, audio visual equipment operations, public address systems and stage management and can be applied to workplaces such as stage productions, radio and medium to large recording studios, among others.

ATAR Contribution
Students wishing to receive an ATAR contribution for either Units 3 and 4 sequence from VCE VET Music Industry must undertake scored assessment for the purpose of achieving a study score. This study score can contribute directly to the primary four or as a fifth or sixth study.

Work Placement
This program includes a work placement (Structured Workplace Learning- SWL)
Related Subjects you could include in your course:

- VET Information Technology, Drama, Psychology, Mathematics

Useful Links


VCE VET Sport and Recreation

Subject Code: VES

Previous Years Materials & Resources – guide only

<table>
<thead>
<tr>
<th>Unit</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1 &amp; 2</td>
<td>$470.00</td>
</tr>
<tr>
<td>Unit 3 &amp; 4</td>
<td>$370.00</td>
</tr>
</tbody>
</table>

Provider:

Goulburn Ovens TAFE

Bus leaves Kyabram Transit Centre at 7.10 am and returns at 5.30 pm.

The VCE VET Sport and Recreation program is drawn from the SIS10 Sport, Fitness and Recreation Training Package and provides students with the opportunity to acquire and develop the skills, knowledge and confidence to work in the areas of sport and outdoor recreation. Leadership, organizational and specialist activity skills will be developed through the units of competency undertaken in the selected program.

SIS20313 Certificate II in Sport and Recreation

Certificate II in Sport and Recreation provides students with the skills and knowledge that will enhance their employment prospects in the sport and recreation industries. Students can choose from a range of electives including teaching the fundamental skills of athletics, basketball, gymnastics or squash, maintaining sport and recreation facilities and applying legal and ethical coaching practices.

SIS30513 Certificate III in Sport and Recreation

Certificate III in Sport and Recreation provides students with the skills and knowledge to work in the Sport and Recreation industry. In Units 1 and 2, students can choose from a range of electives to create a program of their choice, including teaching the fundamental skills of athletics, basketball, gymnastics or squash and implementing sports injury prevention. Units 3 and 4 offers scored assessment and includes core units such as conduct basic warm-up and cool-down programs, plan and conduct sport and recreation sessions and undertake a risk analysis.
of activities. Students also undertake electives drawn from the Aquatics, Fitness, Sport and Outdoor Recreation streams.

**ATAR Contribution**

Students wishing to receive an ATAR contribution for the Units 3 and 4 sequence must undertake scored assessment for the purposes of achieving a study score. This study score can contribute directly to the ATAR, either as one of the student's best four studies (the primary four) or as a fifth or sixth study.

A student who opts out of scored assessment in the VCE VET Sport and Recreation program will not be eligible for a contribution towards their ATAR.
WRB30103 – Certificate III in Beauty Services

Subject Code: VBS

Previous Years Materials & Resources Costs – guide only

Unit 1 & 2 $565.00

Unit 3 & 4 $620.00
(includes Beauty Kit)

Provider:
Delivered by Goulburn Ovens TAFE.
Bus leaves Kyabram Transit Centre at 7.10 am and returns at 5.30 pm.

VCE Credit:
Under block credit recognition, credit toward the VCE is determined by the AQF level at which the units of competence/modules are recognised and the nominal hours of training completed.

VTAC may award students who receive a Units 3 and 4 sequence through Block Credit Recognition an increment (10% of the average of the Primary Four scaled studies) towards their ATAR.

Description
This qualification is part of the Beauty Training Package and provides the skills and knowledge needed to work as a beauty practitioner in a salon, providing a limited range of services/treatments to clients.

Core: Provide manicure and pedicure services; Conduct financial transactions; Apply techniques to update beauty industry knowledge; Provide service to clients; Apply knowledge of nail science to nail services; Apply knowledge of skin biology to beauty treatments; Advise on beauty services; Provide lash and brow treatments; Provide temporary epilation and bleaching treatments; Communicate in the workplace; Work effectively in a retail environment; Apply safe working practices; Merchandise products; Perform routine housekeeping duties; Sell products and services. Electives: Apply gel nail enhancement; Apply acrylic nail enhancement; Apply nail art; plus more.

Career opportunities:
As a Certificate III qualified Beauty Therapist you can gain employment within a beauty salon performing the various practical skills you have developed as well as allowing you to perform general reception area duties, retailing skincare and makeup products, merchandising, meeting and greeting clients and managing client bookings. This qualification will also enable you to work within a department store or pharmacy as a cosmetic consultant or assistant.
**ATAR Contribution**

VTAC may award students who receive a Units 3 and 4 sequence through Block Credit Recognition an increment (10% of the average of the Primary Four scaled studies) towards their ATAR.

**Work Placement**

This program includes a work placement (Structured Workplace Learning: SWL)

**Useful Links**

WRH20109 – Certificate II in Hairdressing

**Subject Code:** VHA

Previous Years Materials & Resources Costs – guide only

<table>
<thead>
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<th>Unit</th>
<th>Cost</th>
</tr>
</thead>
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<tr>
<td>3 &amp; 4</td>
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Provider: Goulburn Ovens TAFE - Bus leaves Kyabram Transit Centre at 7.10 am and returns at 5.30 pm.

**VCE Credit:**

Under block credit recognition, credit toward the VCE is determined by the AQF level at which the units of competence/modules are recognised and the nominal hours of training completed.

VTAC may award students who receive a Units 3 and 4 sequence through Block Credit Recognition an increment (10% of the average of the Primary Four scaled studies) towards their ATAR.

**Description**

This qualification is from the Hairdressing Training Package. It is for people who want to gain employment as a hairdressing salon assistant or hairdressing receptionist. It will also assist you in gaining employment as a hairdressing apprentice. The course provides you with an overview of the hairdressing industry. You will also acquire some practical skills in hairdressing. As part of the course you will be required to complete one week of work in a hairdressing salon.

Core: Prepare clients for salon services; Maintain tools and equipment; Maintain and organise work areas; Follow personal health and safety routines at work; Perform head, neck and shoulder massage; Develop hairdressing industry knowledge; Dry hair to shape; Communicate in the workplace; Work effectively in a retail environment; Apply safe working practices. Plus electives.

**Career opportunities:**

This is for the person wishing to gain a pre-vocational qualification or an understanding of hairdressing prior to obtaining full-time employment as a hairdressing, apprentice or full-time trainee in the hairdressing industry.

**ATAR Contribution**

VTAC may award students who receive a Units 3 and 4 sequence through Block Credit Recognition an increment (10% of the average of the Primary Four scaled studies) towards their ATAR.

**Work Placement**

This program includes a work placement (Structured Workplace Learning- SWL)

**Useful Links**

Certificate II in Plumbing (Pre-apprenticeship)

Course Code 22304VIC

Subject Code: VEP

Previous Years Materials & Resources Costs – guide only

<table>
<thead>
<tr>
<th>Unit</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 &amp; 2</td>
<td>$260.00</td>
</tr>
<tr>
<td>3 &amp; 4</td>
<td>$260.00</td>
</tr>
</tbody>
</table>

This course is ideal for those wanting to get a head start on their plumbing career. It will provide you with the skills and knowledge required to seek employment as a plumbing apprentice in the domestic or commercial/industrial sectors. On successful completion of this course you will be equipped with the skills and knowledge to:

- define and relate plumbing industry terminology
- distinguish plumbing industry streams and opportunities
- identify the properties and characteristics of plumbing and building materials
- distinguish, select and use plumbing tools for their appropriate application
- plan, calculate and mark out basic plumbing tasks
- follow work instructions and select safe working procedures.

Delivered at Goulburn Ovens TAFE each Wednesday.

Bus leaves the Kyabram Transit Centre at 7.10 am and returns at 5.30pm.