

# **Enrichment Electives**

Each of these electives are one semester in length including a weekly online live lesson after school and 3 seminar days at CHES. Students can choose to study more than one of these electives:

| Research Matters  | Foundations of VCE Extended Investigation |
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| Mind Over Myth: Exploring Philosophy with Critical Thinking | Foundations of VCE Extended Investigation |
| Introduction to Algorithmics                                | Foundations of VCE Algorithmics           |
| LingoLab: Unveiling the Wonders of Real-world Language      | Foundations of VCE English Language       |
| Mathematical Investigations                                 | Foundations of VCE Specialist Mathematics |

CHES offer these five electives to students to prepare them for future study of VCE Algorithmics, VCE Extended Investigation, VCE English Language or VCE Specialist Mathematics. We aim to extend students who are interested in these foundations of successful university study through research, linguistics, critical thinking, mathematical problem solving and computational thinking.

Each of these electives are one semester in length with flexible study options. Students can study more than one of these electives but will complete one each semester.

These electives are not intended to replace electives that students may be taking at their base school but instead they provide enrichment and extension beyond the school curriculum. Students will be expected to complete 2 or 3 hours of hy-flex learning each week (for the 15-week semester).



## **Research Matters**

This subject gives students the opportunity to develop their knowledge and understanding of what it means to research and complete their own independent investigation into an area of their choice. Students will be taught how to navigate the wealth of information available to them, critically evaluating the resources, methods and ideas found, and applying these skills to their own research.

Students will develop their own research question, test and evaluate research methods, collect primary evidence and present their findings in an exhibition and research journal.

#### Assessment

Students will be assessed on their research journal, completed throughout the semester and their presentation of research at the CHES Expo.

#### Pathways

This subject aligns with the Victorian Curriculum Critical and Creative Thinking standards. It will prepare students for VCE Extended Investigation.

# Mind Over Myth: Exploring Philosophy with Critical Thinking

This subject equips students with essential critical thinking skills through the lens of philosophical inquiry. Students will explore timeless questions that lie at the heart of human existence—What is reality? What is a good life? How do we know what is right or wrong? Engaging with ideas from ancient and contemporary philosophy, students will deepen their understanding of the world and themselves.

Throughout the course, students will learn to construct logical arguments, evaluate sources and reasoning, and ask meaningful questions. They will participate in structured discussions and philosophical debates on contemporary and ethical issues, building skills in active listening, metacognition, and reasoned communication. Emphasis will be placed on applying these thinking strategies across all areas of learning.

#### Assessmen

Students will be assessed on written responses to philosophical and critical thinking prompts, as well as impromptu and prepared debates and presentations.

#### Pathways

This subject aligns with the Victorian Curriculum Critical and Creative Thinking and Ethical Capability standards. It builds a foundation for VCE Extended Investigation and VCE English Language.

# Introduction to Algorithmics

This subject will allow students to develop their computational and analytical thinking skills, engage with solving problems using pseudocode (including an introduction to using Python for coding). Students will learn how to solve real world problems using computational methods and about different types of Abstract Data Types.

Students will create individual and group Algorithm Design Projects.

### Assessment

Students will be assessed on their responses to their individual and group projects.

### **Pathways**

This subject aligns with the Victorian Curriculum Digital Technologies standards. It will prepare students for VCE Algorithmics.

# LingoLab: Unveiling the Wonders of Realworld Language

This subject is designed for students who want to know how language works in real life. Language communicates our emotions and ideas in everyday settings, not just in books and films. Therefore, our studies will focus on all things language related, from sounds to sentences, words to vocal effects, and everything in between. Using the English Language as a lens, students will also explore how language is used for creative endeavours and how its use online has promoted further linguistic change.

Students will learn about the metalinguistic tools linguists use to analyse language, write analytically and apply language features to their own creative writing

#### Assessment

Students will be assessed on their analysis of language in a folio of textual annotations completed throughout the elective and discussion of language

#### **Pathways**

This subject aligns with the Victorian Curriculum English standards. It will prepare students for VCE English Language.

## Mathematical Investigations

This subject is designed for students who want to explore how mathematics helps us understand and solve real-world problems. Students will investigate a wide range of mathematical ideas—from geometry and number theory to data modelling and algorithmic thinking—using reasoning, problem-solving and computational approaches. Through tasks and a final investigation project, students will reflect on what it means to think mathematically and develop a deeper appreciation for how mathematics is used to make sense of the world.

#### **Assessment**

Students will be assessed on their responses to their tasks and investigations.

#### Pathways

This subject aligns with the Victorian Curriculum Mathematics standards and supports students aiming for higher-level mathematical studies in VCE, such as Specialist Mathematics or Algorithmics.

