

Software Engineering

The following contains a description of the course we offer to students at St Marys Senior High. It is intended as a guide to help you select your subjects and you should read it carefully.

Please note:

- The details given represent the way that the course is delivered at St Marys Senior High and may involve different choices from the way other schools might operate the same course.
- Classes can only be formed where sufficient students select the particular course. The fact that a course is listed here is not a commitment to run the course in a particular year.
- The arrangements for particular courses are subject to change for a variety of reasons.
- HSC students may elect to take extension courses which we offer in English, French, History, Japanese, Mathematics, Music and the Sciences.

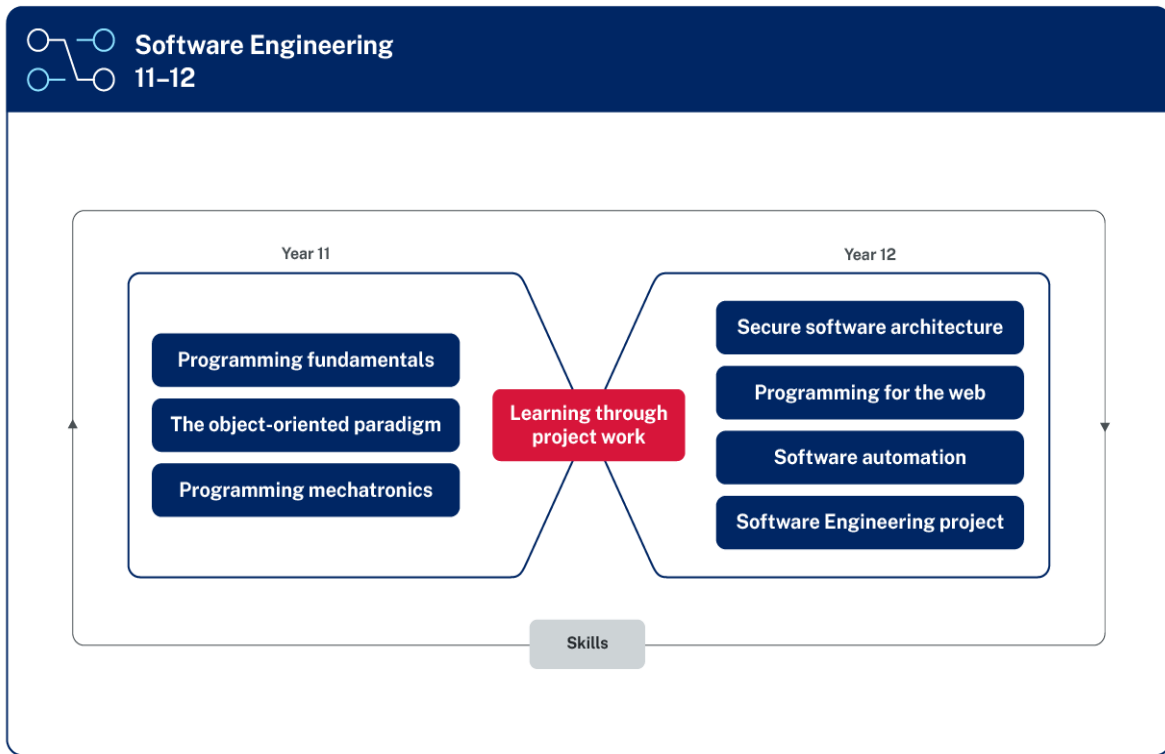
Software Engineering			
Units	Type	ATAR	Faculty Teaching This Course
2	Board Developed Course – Examinable at the HSC, marks can be used to count towards an ATAR	A – Counts towards an ATAR with no restrictions	Computing Studies

Introduction

Software Engineering is a new computing course, replacing the old Software Design and Development course. It is being offered for Year 11 for the first time in 2024 and will be assessed in the Higher School Certificate in 2025. Like its sister course Enterprise Computing (also being offered for the first time in 2024), Software Engineering has a strong focus on practical, hands-on experiential learning. The Higher School Certificate Examination that students will sit is an online, computer-based examination.

What will I be doing in this course?

The Software Engineering syllabus uses this diagram to give a brief overview of course content in Year 11 and 12:



What should I be able to do at the end of the course?

Students will be able to:

- Understand programming principles and confidently propose, plan, prepare, code and test a variety of solutions based on initial criteria.
- Select code and test a variety of sensors used in Mechatronics/Robotics for specific purposes.
- Work collaboratively on a variety of problems and solutions.
- Explore current trends in computing and software development and develop innovative solutions to defined problems.
- Understand and analyse current and emerging trends in security and internet programming.
- Document a project from initial concept to final evaluation and all the steps in between.
- Demonstrate project management and high-level communication skills.
- Demonstrate high-level critical thinking and practical problem-solving skills.

How will this course help me in the future?

Software Engineering is geared towards students who want to follow a career path in software development, mechatronics (robotics) and programming. Students will be exposed to a variety of programming languages, including Python, C, C#, JavaScript and so on.