**9.** Computing is an essential part of well-rounded academic preparation.

An increasing number of universities and employers see students with experience in information systems as a sign of academic well-roundness to complete any degree successfully.

**10.** Future opportunities in computing are without boundaries.

Computing is one of those fields where it is almost impossible to predict what will happen next. This is why we cannot even begin to imagine all the ways that you can make a contribution to it and it can make your life's work exciting and real.

#### **Frequently Asked Questions**

Q: What do I need to study this subject?
A: IPT is a mixture of theory and "hands on" activities. A typical class lesson would involve taking notes and trying things on computer. Handouts are RARELY given out in this subject - ALL notes, web sheets and other resources are accessed from the school moodle.

Q: What are the pre-requisites?
A: IPT has NO formal pre-requiste subjects. There is no recommended courses that lead to IPT. No pre-knowledge is assumed when starting out in IPT. It is assumed, however, that you have a good grasp of english and your maths is also acceptable - during the course you will learn a number of new, technical languages and will be immersed in complex problem solving.

Q: Do I need a computer at home?
A: Need - no. Generally adequate exposure/
practical access is provided for your child at
school - both in-class and outside normal class
hours (before school, lunch time and after
school). Is there an advantage in being able to
practise this stuff at home - Definitely! Is there
advantage in being able to contact your teacher
AT YOUR CONVENIENCE - Definitely!

Q: What is the work load like?

A: Heavy and irregular. Students are engaged in a variety of problem solving tasks, some minor class tasks, others major projects involving complex system development. Often, major projects require significant investment of out-of-class time. Although homework is not set every night, successful students of IPT are able to find consolidation work taking each night. Students need to be self-motivated and be able to work productively in groups and solo.

Q: What sort of assignments are there?

A: Lots of small project based computer assignments in year 11. Then in year 12 students need to complete one individual and one group based information system. All other assessment tasks will consist of short knowledge tests and their major exams.

Q: I think my child needs to learn computers - is IPT the subject for them?

A: If you want them to problem solve using computers and learn about some aspects of computer science - YES. If you want them to be competent typists, know how to drive a graphics package or wordprocessor, then this is not the course for your child as these general 'productivity' applications are not covered as part of the course. The teacher already assumes they can use them. Should students persue an IT major, then many aspects of IPT will re-inforce content encountered in the first couple of years at Uni. Importantly, IPT also increases student confidence using computers, making new skill acquisition less difficult.

Q: My child enjoyed IT in Years 7 -10 will they enjoy IPT?

A: IPT and Junior IT have nothing in common - except they both use computers as tools. IPT is not the subject to do if your child need to learn Word-processing or Spreadsheeting for example. It is assumed that they already have those skills, or can acquire them in their own time.

# Information Processes and Technology WHS

Year 11 & 12

Expertise in computing helps you even if your primary career choice is something else.





Information Processes & Technology



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For further information on this course and how it can help you with your other studies or future employment see Mr Mete.

### Why Study IPT?

## Top 10 Reasons to Study IPT

1. Computing is part of everything we do!

Computing and computer technology are part of just about everything that touches our lives from the cars we drive, to the movies we watch, to the ways businesses and governments deal with us. Understanding different dimensions of computing is part of the necessary skill set for an educated person in the 21st century. Whether you want to be a scientist, develop the latest killer application, or just know what it really means when someone says "the computer made a mistake", studying computing will provide you with valuable knowledge.

**3.** Computing enables you to make a positive difference in the world.

Computing drives innovation in the sciences (human genome project, AIDS vaccine research, environmental monitoring and protection just to mention a few), and also in engineering, business, entertainment and education. If you want to make a positive difference in the world, study computing.



Today a person is subjected to more new information in a day than a person in the middle ages in his entire life!

**4.** Computing offers many types of lucrative careers.

Computing jobs are among the highest paid and have the highest job satisfaction. Computing is very often associated with innovation, and developments in computing tend to drive it. This, in turn, is the key to national competitiveness. The possibilities for future developments are expected to be even greater than they have been in the past.

2. Expertise in computing enables you to solve complex, challenging problems.

Computing is a discipline that offers rewarding and challenging possibilities for a wide range of people regardless of their range of interests. Computing requires and develops capabilities in solving deep, multidimensional problems requiring imagination and sensitivity to a variety of concerns.

**5.** Computing jobs are here to stay, regardless of where you are located.

Employment is expected to grow much faster than the average, and job prospects should be excellent.

Employment change. Overall employment of computer network, systems, and database administrators is projected to increase by 30 percent from 2008 to 2018, much faster than the average for all occupations. In addition, this occupation will add 286,600 new jobs over that period. Growth, however, will vary by specialty.

Employment of network and computer systems administrators is expected to increase by 23 percent from 2008 to 2018. Employment of network systems and data communications analysts is projected to increase by 53 percent from 2008 to 2018 Demand for Web administrators and Web developers will also be strong. More of these workers will be needed to accommodate the increasing amount of data sent over the Internet, as well as the growing number of Internet users

#### Significant Points

- Employment is expected to grow faster than the average for all occupations.
- Many managers possess advanced technical knowledge gained from working in a computer occupation.
- Job prospects should be excellent.
- **6.** Expertise in computing helps you even if your primary career choice is something else.

Having a computing major will provide you with a foundation of knowledge, problem solving and logical thinking that will serve as a competitive advantage to you in your career, in whatever field you choose.

7. Computing offers great opportunities for true creativity and innovativeness.

Creating high-quality computing solutions is a highly creative activity, and computing supports creative work in many other fields. The best solutions in computing exhibit high levels of elegance and beauty.

**8.** Computing has space for both collaborative work and individual effort.

Computing is often about being part of a team that requires people with many different kinds of skills. Yet there is also plenty of space for individual flair and imagination.