Course Title:	**Computing Technology in Society**
Course Code:	**COMP501**
Descriptor Start Date:	**31/01/2025**
POINTS:	**15.00**
LEVEL:	**5**
PREREQUISITE/S:	**None**
COREQUISITE/S:	**None**
RESTRICTION/S:	**None**

LEARNING HOURS

Hours may include lectures, tutorials, online forums, laboratories. Refer to your timetable and course information in Canvas for detailed information.

Total learning hours: 150

PRESCRIPTOR

Provides a wide-ranging, multidisciplinary introduction to the evolution and application of increasingly complex and powerful computer systems (and other forms of digital technology) with particular emphasis on their impact on society.

LEARNING OUTCOMES

1. Demonstrate competence in understanding key technical issues concerning the operation, implementation, and application of digital platforms, by:
   • Explaining operating systems basics
   • Describing computer architectures and platforms as relevant for nearfutureICT developments
   • Describing data storage techniques and technologies of relevance to near-futureICT
2. Critically appraise past, present and future application of digital systems with particular emphasis on their impact on society in general and also upon the individual.
3. Demonstrate an awareness of enterprise information systems, their application in the business environment, and modelling techniques for systems requirements, by:
   • Analysing business cases and documenting the purpose, objectives, data requirements, data flows, input documents and output documents of common business functions and processes expressed in a range of information systems (such as: Transaction Processing Systems, Enterprise Resource Planning Systems, Business Intelligence and Analytics, Collaborative Information Systems).
4. Formulate personal ethical positions in relation to the development, manufacture, application, expansion and disposal of digitalsystems
5. Demonstrate competence in understanding of the power of digital systems when placed in the hands of non-benign agencies.

CONTENT

The course covers the following topics (This may vary from semester to semester)
- Operating systems basics
- Computer architectures and platforms as relevant for near-futureICT developments
- Data storage techniques and technologies of relevance to near-futureICT
- Enterprise information systems
- Modelling techniques for systems requirements, e.g Data Flow diagrams
- Documenting the purpose, objectives, data requirements, data flows, input documents and output documents of common business functions and processes
- Information systems, such as: Transaction Processing Systems, Enterprise Resource Planning Systems, Business Intelligence and Analytics, Collaborative Information Systems.
- The impact of Computers on Society in the areas below:

Part I Opportunities
- 1 Digital inclusion
- 2 Digital media and intellectual property
- 3 Computers in education and learning
- 4 Computers in medicine and health care
- 5 Free speech, politics, and government
- 6 Law and order, war and peace

Part II Risks
- 7 Security
- 8 Safety
- 9 Privacy

Part III Choices
- 10 Automation, work, and jobs
- 11 Artificial intelligence, explanations, trust responsibility, and justice
- 12 Lifestyle

Computing Ethics and Professionalism with respect to:
- Equity & Access
- Honesty and Deception
- Privacy
- Property Rights
- Quality of Life
- Risks and Reliability
- Use of Power
- Ethical/moral dilemmas

LEARNING & TEACHING STRATEGIES

Lectures: The weekly lectures are to be supported by suitable and contemporary technologies.

Tutorials: These may take the form of online discussions (supported by means of AUTonline, readings, exercises, collaborative technologies, and videos). The tutorials are designed to support content presented in lectures and to assist with assignments and the group project activity. Additionally, the tutorial sessions will provide assistance with the use of the technologies and software systems which will be employed in this course.

AUTonline: All students attending this paper are expected to access the course website regularly (at least twice weekly), study content presented on the website and where appropriate participate in interactive discussion by means of electronic communication tools.

Group project: Approximately six weeks after the commencement of this course, students will be provided with details concerning the group project activity.

Learning and Communication Tools: All students enrolling in this course will be expected to use a range of suitable and contemporary technologies.

ASSESSMENT PLAN

Assessment Event	Weighting %	Learning Outcomes
Individual Assignment 1	40.00	1, 2
Group Assignment 2	60.00	3, 4, 5

Grade Map **MAP1**

A+ A A- Pass with Distinction
B+ B B- Pass with Merit
C+ C C- Pass
D Fail

Overall requirement/s to pass the course:

To pass this course, students must achieve a minimum overall grade of C-.

LEARNING RESOURCES

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For further information, contact: Te Ara Auaha - Faculty of Design & Creative Technologies

Principal Programme:	**AK3697, Bachelor of Computer and Information Sciences**
Related Programme/s:	**AK3698** **AK1041** **AK3001** **AK3003** **AK3756** **AK3706**