

# 2025 ICE & CODE

Computer Engineering & Software Development

## 2025 April IT Short Courses

	Course	Level	Credits	Dates	Days	Time
Week 1	Networks	3	5	April 15 - 17	Tue - Thurs	9.00am - 3.00pm
	Programming	3	6	April 15 -17	Tue - Thurs	9.00am - 3.00pm
Week 2	Digital Security	3	5	April 22 - 24	Tue - Thurs	9.00am - 3.00pm
	**Games	4	5	April 22 - 24	Tue - Thurs	9.00am - 3.00pm

## 2025 July IT Short Courses

	Course	Level	Credits	Dates	Days	Time
Week 1	Networks	3	5	July 1 - 3	Tue - Thurs	9.00am - 3.00pm
	Programming	3	6	July 1 - 3	Tue - Thurs	9.00am - 3.00pm
Week 2	Digital Security	3	5	July 8 - 10	Tue - Thurs	9.00am - 3.00pm
	**Games	4	5	July 8 -10	Tue - Thurs	9.00am - 3.00pm

## 2025 September – October IT Short Courses

	Course	Level	Credits	Dates	Days	Time
Week 1	Networks	3	5	Sept 23 - 25	Tue - Thurs	9.00am - 3.00pm
	Programming	3	6	Sept 23 - 25	Tue - Thurs	9.00am - 3.00pm
Week 2	Digital Security	3	5	Sept 30 - Oct 2	Tue - Thurs	9.00am - 3.00pm
	**Games	4	5	Sept 30 - Oct 2	Tue - Thurs	9.00am - 3.00pm

## How to enrol onto the IT Short Courses

### For Students/Parents

- Read the short course information provided.
- Contact the school Careers department and advise of students' interest to study on short courses and to further discuss costs, timetable, online and onsite delivery of courses.
- Private booking by parents, email student details to [loveIT@techtorium.ac.nz](mailto:loveIT@techtorium.ac.nz)

### For School Staff (Careers Dept, Teachers)

- Enrol students on our website [techtorium.ac.nz/teachers-portal/#BOOKINGS](http://techtorium.ac.nz/teachers-portal/#BOOKINGS)
- For enrolment queries contact Student Services on [loveIT@techtorium.ac.nz](mailto:loveIT@techtorium.ac.nz)
- Techtorium Student Services department will confirm student enrolments with the school.

\*\* Programming is a pre-requisite for Games

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## Computer Engineering & Software Development

### Techtorium Short Courses

Information Technology (IT) is an exciting and ever-evolving industry for anyone who is passionate about technology. At Techtorium we have a range of IT Short Courses which allow High School students to get a real taste of what it's like to study IT at a Tertiary level. These 3 or 4-day courses cover a variety of topics that are designed to give school leavers an insight into some of the main areas covered in our Full time Diplomas in Computer Engineering and Software Development. Onsite at Techtorium our Innovative Learning Environment initiates critical thinking and aids our Expert Trainers to deliver meaningful information across larger groups whilst still maintaining a high quality of understanding. If you'd like to know more about our short courses head over to our website [techtorium.ac.nz/star-gateway-courses/](http://techtorium.ac.nz/star-gateway-courses/) or email us at [pathways@techtorium.ac.nz](mailto:pathways@techtorium.ac.nz)

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### ICE – Introduction to Computer Engineering

#### Digital Security

Year 12 & 13 | Level 3 | 5 credits

An introduction to Digital Security to identify and describe risks and compliance requirements when using digital devices and digitally stored and transmitted information in an organisational context.

#### What you'll learn:

- Describe risks and implement security solutions when using digital tools.
- Understand digital responsibility and navigating legal and safety standards.
- Procedures to address security and privacy risks and meet good practice requirements in an organisational context.
- Procedures and solutions to address potential health and safety hazards associated with the use of digital tools in terms of personal health and wellbeing and prevention of harm.

#### Networks

Year 12 & 13 | Level 3 | 5 credits

An introduction to Networks, to demonstrate and apply knowledge of the principles of computer networking

#### What you'll learn:

- Identifying and describing the components of LANs and WLANs
- Networking concepts and network services.
- Identifying and describing the functions and features of intermediary devices and network media.
- Technologies for connecting to the internet.
- Principles of computer networks, applied to build, configure and test network works.

### CODE – Introduction to Computer Programming

#### Programming

Year 12 & 13 | Level 3 | 5 credits

An introduction to Programming, this course will give you a basic understanding of how to plan and create a computer program. You will learn to write code, test and adjust a program to solve a problem and document your process.

#### What you'll learn

- Investigate, plan and create a conceptual design to propose a software solution to an existing problem
- Learn how to develop software using Visual Studio 2022 and Visual C# language
- Create a simple Windows Application Form using a variety of tools
- Apply Data Validation processes
- Practice testing, debugging and code modification.

#### Games

Year 12 & 13 | Level 4 | 5 credits

\*Programming is a pre-requisite to Games

An introduction to the concepts of Game Development, this course will give you a basic understanding of how to move a game from concept through to design with basic programming skills. By the end of the course, you will have designed a prototype, tested a simple game and created documentation for it.

#### What you'll learn

- Investigate a given scenario and plan and create a digital solution (Game) for the given problem
- Create, test and evaluate an integrated digital solution (Game) to meet the given requirements
- Learn more about Visual Studio 2022 and Visual C# language
- Design a simple game using a variety of tools
- Create user manual and documentation for the game.

### Course Costs

1st & 2nd Courses	3rd & 4th Course	1st & 2nd Courses	3rd & 4th Course
\$230+GST. Per Course, Per Student	\$210+GST. Per Course, Per Student	\$230+GST. Per Course, Per Student	\$210+GST. Per Course, Per Student

\*\* Programming is a pre-requisite for Games