

# Possible Pathways for Shift Programme (Dunedin, January to December 2022, preliminary)

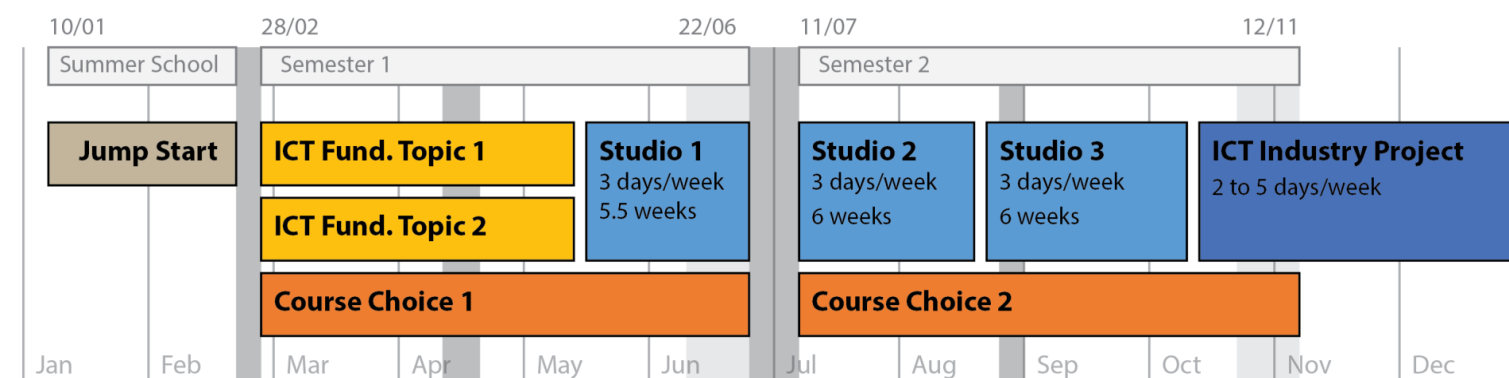
These are suggested pathways only as we are flexible to accommodate for your interests and your professional background. Please talk to us about your goals.

	Web Development	General Development	Systems Development	Data Science	User Experience Designer	Software Testing	Network Administration	Digital Marketing	Robotics & Internet of Things	Geographic Information Systems	Systems Administration
<b>Jump Start Summer School</b>	COMP161** Computer Programming	COMP162 Foundations of Computer Science	COMP161** Computer Programming	STAT110 OR COMP161**	COMP161** Computer Programming	COMP161** Computer Programming	COMP101 OR COMP161**	COMP101 Foundations of Information Systems	COMP101 OR COMP161**	COMP101 OR COMP161**	COMP101 OR COMP161**
<b>COMP270 ICT Fundamentals Semester 1</b>	Database Theory & App. (COSC344) HCI & User Experience (INFO203)	Database Theory & App. (COSC344) HCI & User Experience (INFO203)	Database Theory & App. (COSC344) HCI & User Experience (INFO203)	Database Theory & App. (COSC344) Prog. for Scientists (COMP151)	Database Theory & App. (COSC344) Dev. Information Sys. 1 (INFO201)	Database Theory & App. (COSC344) HCI & User Experience (INFO203)	Prog. for Scientists (COMP151) Dev. Information Sys. 1 (INFO201)	Prog. for Scientists (COMP151) HCI & User Experience (INFO203)	Prog. for Scientists (COMP151) Dev. Information Sys. 1 (INFO201)	Prog. for Scientists (COMP151) DB Theory (COSC344) OR Pract. DS (COMP120)	Prog. for Scientists (COMP151) Dev. Information Sys. 1 (INFO201)
<b>Course Choice 1 Semester 1</b>	IN512 Fundamentals of Web Development	COSC201 Algorithms & Data Structures OR COSC202 Software Development	INFO201 Developing Information Systems 1	COMP120 Practical Data Science	INFO203 HCI and User Experience	INFO201 Developing Information Systems 1	IN515 Introduction to Networks	MART466 Digital Marketing	IN620* Embedded Systems	SURV208 Introduction to GIS AND SURV319 Spatial Algorithms & Prog.	IN616* Operating Systems Concepts
<b>Course Choice 2 Semester 2</b>	IN607 Introductory App Development	COSC203 Web, Databases and Networks	INFO202 Developing Information Systems 2	INFO204 Introduction to Data Science	IN721* Mobile App Development OR INFO351* XR: Virtual & Augmented Reality	IN733* Quality Assurance & Software Testing	IN615 Switching and Routing	MART448 Advanced Business Analytics	IN621 Robotics and Automation	SURV411 Adv. Spatial Analysis & Modelling OR SURV412 Geovisualisation & Cartography	IN609 Operations Engineering
<b>COMP371, 372 &amp; 373 ICT Studio 1, 2 &amp; 3 Semester 1 &amp; 2 Possible workshops</b>	Tools for Teamwork Agile Methods Web Design & Dev Tools	Tools for Teamwork Agile Methods IT Security	Tools for Teamwork Agile Methods IT Security	Tools for Teamwork Agile Methods Data Visualisation	Tools for Teamwork Agile Methods Web Design & Dev Tools	Tools for Teamwork Agile Methods Data Visualisation	Tools for Teamwork Robotics IT Security	Tools for Teamwork Web Design & Dev Tools Data Visualisation	Tools for Teamwork Agile Methods IT Security	Tools for Teamwork Agile Methods Data Visualisation	Tools for Teamwork Robotics IT Security
<b>COMP390 ICT Industry Project Nov/Dec</b>	Front and back-end web development (HTML, CSS, PHP, JavaScript) incl. design concepts and usability studies.	Software development for diverse assignments incl. database connections or web design and implementation.	Analysis and development of information systems with focus on data management and data analysis.	Application of data-driven modelling techniques on a wide range of problems, incl. visualisation and reporting.	Design, prototyping and testing of user interfaces with focus on usability & user experience applying a user-centred approach.	Communication of complex technical information. Design and application of test plans and usability studies.	Design, installation, configuration and monitoring of hardware and software components to build computer networks.	Application of marketing concepts and online tools to implement digital marketing campaigns, incl. advanced analytics.	Design and implementation of meaningful applications that build on sensing and automation technology.	Using principles, methods and concepts of GIS for mapping, presenting, transforming and analysing spatial data.	Managing of user authentication, backup, disaster recovery as well as configuring & deploying cloud services and resources.

Courses/content offered by: ■ Department of Computer Science ■ Department of Mathematics & Statistics ■ Department of Marketing ■ Otago Polytechnic, IT ■ Department of Information Science ■ School of Surveying

\*\* requires confirmation  
\*\* offered in pre-christmas summerschool

## Timeline



For further information:  
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