Installing Qt Creator

Firstly download the .exe file (from DISK2017) on to your hard disk. Once the .exe is saved on the hard disk, double click the file **qt-opensource-windows-x86-mingw482_opengl-5.3.0.exe**. During installation, you will be given a number of options. We recommend that you accept all the defaults.

1. Using the software

To help you get started, we present a short guide to your first "Hello Qt" program.

Step 1. Starting Qt Creator

Double-click the Qt Creator shortcut on your desktop.



The following dialog will be displayed:

🕔 Qt Crea	ator			
File Edi	t Build Debug Analyze	Tools Window Help		
Qt				
Welcome	Projects		Open Project	
	FIDJECCS	View Project	J Open Project	
Edit	Examples			
Dosign	Tutoriala	Sessions	Recent Projects	
Design		D default		
Debug				
Projects	New to Qt?			
	Learn how to develop your			
Analyze	own applications and explore Qt Creator.			
?				
Help	Get Started Now			
~	L Qt Account			
	Qt Cloud Services			
	Online Community			
	Blogs			
	User Guide			
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	■ P- Type to locate (Ctrl		Application Output 4 Compile Output 5 QML/JS Console	•

Step 2. Creating a project

Click on the New Project button. The following dialog will be displayed:

New Project								
Choose a template:		Desktop Templates 💌						
Projects Applications Libraries Other Project Non-Qt Project Import Project Files and Classes	 Qt Widgets Application Qt Quick Application Qt Console Application HTML5 Application Qt Quick UI 	Creates a Qt application for the desktop. Includes a Qt Designer-based main window. Preselects a desktop Qt for building the application if available. Supported Platforms: Desktop						
	·	Choose Cancel						

Select Other Project and then Empty Qt Project from the list of options and click on Choose.... The following dialog will be displayed:

Empty Qt Projec	t
Location	Introduction and Project Location
Kits Summary	This wizard generates an empty Qt project. Add files to it later on by using the other wizards.
	Name: Untitled
	Create in: C:\Users\Thomaa Browse Use as default project location
	Next Cancel

Type **Hello** as the project name and change the location to your choice (e.g. **C:\unisa\cos2614**) and click on Next. The following dialog will be displayed:

🕒 🛋 Empty Qt	Project	X
Location Kits Summary	Kit Selection Qt Creator can use the following kits for project Hello :	
	🗹 🏂 Desktop Qt 5.3.0 MinGW 32bit	Details 🔻
-		
	<u>N</u> ext	Cancel

Click on Next. The following dialog will be displayed:

🕒 🗖 Empty Qt I	Project	R contract (
Location	Project Management		
Kits	Add as a subproject to project:	<none></none>	~
	Add to \underline{v} ersion control:	<none></none>	▼ Configure
	Files to be added in		
	C:\unisa\cos2614\Hello	:	
	Hello.pro		
		E	inish Cancel

Leave everything as is on the Project management dialog and click on Finish.

Step 3. Editing a C++ source file

At this stage, you have an empty project without any source code:

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There are different ways of adding a source file to your project. In this situation, we want to add a new source file, so right-click on the project name **Hello** and choose Add New... on the popup menu.

The following dialog will be displayed:

New File		X
Choose a template:		Desktop Templates 💌
Files and Classes C++ BlackBerry Qt GLSL General Java Python	C++ Class C++ Source File C++ Header File	Creates a C++ header and a source file for a new class that you can add to a C++ project. Supported Platforms: Desktop
		Choose Cancel

Select C++ Source File from the list and click on Choose.... A dialog requesting the file name and its location will be displayed:

New C++ Sourc	e File	×
Location Summary	Choose the Location Name: Path: C:\unisa\cos2614\Hello	Browse
	Next	Cancel

Enter the name of the file (eg. main), leave the path as is and click on Next.

🕒 🛯 New C++	Source File	X
Location	Project Management	
🔿 Summary	Add to project:	
	Add to version control: <none> • Config</none>	jure
	Files to be added in C:\unisa\cos2614\Hello:	•
	main.cpp	-
	<u> </u>	ncel

Click on Finish.

An empty **main.cpp** file will appear in the Edit panel.

Type in the following code:

🔯 main.cpp - Hello - Qt Creator		
<u>File Edit Build Debug Analyze Tools</u>	Window Help	
Projects ▼ \7. @ B+ X Qt ▲ B Hello R Hello pro	<pre></pre>	: 10, Col: 1 ⊟+ ×
Welcome	<pre>4 int main(int argc, char* argv[]) { OApplication app(argc, argv); </pre>	
Lait Design	<pre>6 QLabel* label = new QLabel("Hello Qt!"); 7 label->show(); 8 return app.exec();</pre>	
Debug	9 } 10	
Projects		
Analyze		
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Open Documents ▼ 日+ ×	Issues 🧏 🍬 🌶 🛕 🖓	~ ×
Debug		
		_
P- Type to locate (Ctrl	1 Issues 2 Search Results 3 Application Output 4 Compile Output 5 QML/JS Console	

Double click on **Hello.pro** which will display the following in the Edit panel:

Hello.pro - Hello - Qt Creator		
<u>File Edit Build Debug Analyze Tools</u>	<u>W</u> indow <u>H</u> elp	
Projects 🔻 🖓 🖯 🕂 🗙	🔶 🔶 🖬 Hello.pro 👻 Line	: 2, Col: 1 🛛 🗄+ 🗙
Ot A line Hello	1	
Welcome Sources	2 SOURCES += \	
main.cpp	4	
Edit		
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Hello.pro		
main.cpp		
Debug		
P- Type to locate (Ctrl	1 Issues 2 Search Results 3 Application Output 4 Compile Output 5 QML/JS Console	÷ ^

Edit Hello.pro to add QT += widgets

😡 Hello.	pro - Hello	- Qt Crea	itor									X
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	Projects		7, 0	B+ ×	🔶 🔶 🖬	Hello.pro*	_	•	_	Li	ine: 1, Col: 14	B+ ×
Qt	🔺 🛅 He	llo			1 QT +=	widgets						*
Welcome		Hello.pro			2 SOURCE	in.cop						
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Select File and Save All to save all the changes you have made.

Step 4. Building and running the program

It is possible to build and run a program separately, but it's easier to do it in one go.

Click on the Run button (the button with a green triangle in the bottom left-hand corner - circled in red here).



If the build is successful, a small window should appear somewhere on the screen displaying the message **Hello Qt!**. You can resize the window.

III Hello		X	
Hello Qt!			
			1

If the build was unsuccessful, make sure you have entered the program correctly and re-run the project.

When you have finished admiring your first Qt program, close the little window.

2. More on Qt Creator

Please refer to TL 102 (available on myUnisa under Additional Resources).