

Skills Studio / Summer School

# Structure of the Programme

## Semester 1 (30 Credits)

*All Mandatory*

Programming

*10 credits*

Computer Networks

*5 credits*

Web Development

*5 credits*

Computer Systems

*5 credits*

Database

*5 credits*

## Semester 2 (30 credits)

*Specialisms (select 2)*

*Mandatory*

Project/Summer School

*5 credits*

Developer Operations

*5 credits*

Mobile App  
Development

*10 credits*

Enterprise Service  
Development

*10 credits*

Security & Forensics

*10 credits*

## Semester 3 (30 credits)

Project/Placement

*30 credits*

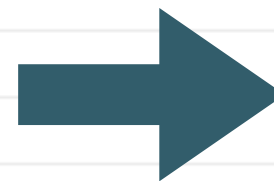
*Mandatory*

# Summer School / Skills Studio



- 4 days per week
- Mostly Practical
- Located in Arclabs / TSSG
- Focus on integrating Web Development + Programming modules
- Weekly tech talks from Industrial Partners
- Assessed via a single project - submitted by end of August.

	12	23	24	25	26	27	28	29
	<i>study-period</i>	30	1	2	3	4	5	6
May	<i>exam-period</i>	7	8	9	10	11	12	13
		14	15	16	17	18	19	20
		21	22	23	24	25	26	27
		28	29	30	31	1	2	3
June	<i>Summer School</i>	4	5	6	7	8	9	10
		11	12	13	14	15	16	17



# Provisional Revised Dates

	S	M	T	W	T	F	S
Week							
May	21	22	23	24	25	26	27
	28	29	30	31	1	2	3
June	4	5	6	7	8	9	10
	11	12	13	14	15	16	17
	18	19	20	21	22	23	24
	25	26	27	28	29	30	1

# Structure of the School

*Tuesday & Friday*

*Wednesday*

*Thursday:*

Introducing Node.js Development

Skills Studio (in association with Redhat)

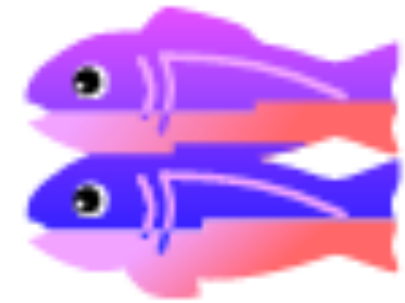
Industry Talks Series from Industry Partners

+ Industry Placement Preparation

	Tuesday		Wednesday		Thursday		Friday
9:30 - 11:00	Online Webinar (with playback)	9:30 - 12:30	Skills Workshop (Arclabs)	9:30 - 1:00	Industry Talks (Arclabs)	9:30 - 11:00	Lab Support (Online Chatroom)

# Tuesday & Friday: Introducing Node.js using glitch.com

	Tuesday		Friday
9:30 - 11:00	Online Webinar (with playback)	9:30 - 11:00	Lab Support (Online Chatroom)



An introduction to developing web applications using Javascript, Node.js, Express.js using a new and highly innovative development environment called Glitch

Fully online delivery - Tuesdays & Fridays

Attended by current and some past students of ICT Skills

# Introducing node.js development: Schedule

Week	Lesson Plan	Javascript Topics	Web Development Topics
1	Become familiar with the Glitch Environment, build some simple apps. Review the basics of the Javascript language	Context, Variables, Boolean Logic	Glitch tour + Features
2	Discover the front-end/back-end nature of the glitch environment. Build an app routing, simple view and including templating. Explore the basics of Objects in Javascript	Objects, JSON, Storing & Retrieving Objects	Web App Introduction, Front End, Back End. Templating.
3	Review Javascript arrays in depth. Explore the MVC paradigm, and implement a simple Form in a Glitch app.	Array basics, Array methods, array iteration, arrays of strings & objects	Model View Controller, Form Design & Programming
4	Investigate the structure of Javascript Objects in more detail, particularly their dynamic nature. Incorporate sessions management into web applications	Objects in Detail	Sessions. Using Sessions in Express.
5	Review Javascript Functions in depth. Learn how to consume an external service from a web application (image storage).	Functions in Depth	APIs for Image Manipulation & Storage

# Wednesday: Skills Studio (in association with Redhat)

Week	Topic	
1	Git Introduction	
2	Agile Methods	
3	Containerisation	
4	MEAN Stack	
5	Git Advance	



# Thursday: Industry Talks

<i>Week</i>	<i>Time</i>	<i>Speakers</i>
1	10:00	<b>Dataworks</b>
	10:30	<b>Fundrecs</b>
	11:30	<b>Se2</b>
	12:00	<b>TSSG</b>
2	10:00	<b>CGM</b>
	10:30	<b>TSSG</b>
	11:30	<b>Tucr</b>
3	10:00	<b>Onaware</b>
	10:30	<b>RedHat</b>
	11:30	<b>Red Hat</b>
	12:00	<b>Nearform</b>
4	10:00	<b>110%</b>
	10:30	<b>Errigal</b>
	11:30	<b>TSSG</b>
	12:00	<b>Sunlife</b>
	12:00	<b>Sunlife</b>
5	10:00	<b>Industry</b>
		<b>Preparation</b>
	12:00	<b>Workshop</b>

# Assessment

Single Web Application  
To be Completed by August 31st