

# MadLab

## Professional Development Brochure

Summer 2019



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# 1 MISSION

**Welcome to MadLab**, the UK's longest-running and **most active** makerspace.

MadLab's mix of formal, and informal training reaches deep into communities, and creates long-lasting, positive change. We have a rapidly-expanding expert-led learning programme – offering people the opportunity to learn a wide variety of digital skills, with a diverse set of learning outcomes. As well as professional development delivering direct to businesses, MadLab also works on behalf of organisations, local councils, third sector and creative/ tech organisations, to deliver making and digital courses to their users.

Previous clients include: Arts Council England, FutureEverything, Jaguar Land Rover, The Prince's Trust, The Wellcome Trust, Nesta, The Nominet Trust, The University of Manchester, Manchester Metropolitan, Brighter Sounds, Whitworth Art Gallery, Manchester City Council, and John Lewis.

In this document you will find details of our full suite of courses, workshops and sessions, and we welcome conversations on tailoring our experiences to suit your precise requirements. If there is something you have in mind that isn't listed here, please contact us and we will create that specific package to suit.

Contact us:

email: [learn@madlab.org.uk](mailto:learn@madlab.org.uk)

twitter: @madlabuk

## 2 COURSES

MadLab's one and two day courses are led by leading industry professionals: Mike Little - the co-founder of WordPress, BAFTA-winner Dan Hett, and bid-writing supremo Laura H Drane. They can be delivered at a location of your choosing, with bespoke content for your audience - or you can learn at MadLab's HQ, where courses run year-round.

Please contact us for a bespoke course quote.

### i BUILD YOUR FIRST SITE WITH WORDPRESS

A one or two day course to guide you through installing WordPress, adding content (including multimedia), interacting with your readers, and customising the look and enhance the functionality of your site.

***Also available as a two day course at MadLab led by WordPress co-founder Mike Little. Please contact us to book. Discounts available for multiple bookings.***

### ii INTERMEDIATE WORDPRESS

Dig deep into theme customisation, learn how to make your site work perfectly on mobile devices, and begin to unleash the full potential of the platform from search engine optimisation (SEO) to security, caching to e-commerce.

***Also available as a two day course at MadLab led by WordPress co-founder Mike Little. Please contact us to book. Discounts available for multiple bookings.***

### iii ADVANCED WORDPRESS

If WordPress is your business, either as a developer, power-user or marketing pro, this is the course for you. Over two days Mike will teach you advanced techniques that will give you a competitive edge. You'll learn insider tips and tricks for managing sites, both for yourself and your clients.

***Also available as a two day course at MadLab led by WordPress co-founder Mike Little. Please contact us to book. Discounts available for multiple bookings.***

### iv GAME DEV 101 - LEVEL 1

Game Dev 101 is a one-day intermediate games development course that gets to grips with all the tools and skills you'll need to dive into programming your own video games. Led by BAFTA-winner Dan Hett, this course is suitable for complete beginners with no experience of coding or programming.

***Also available as a one day course at MadLab.***

## **v GAME DEV 101 - LEVEL 2**

Game Dev 101 – Level 2 is a one-day course that will take you through the fundamentals of creating video games completely from scratch. Led by BAFTA-winner Dan Hett, the course centres around hands-on learning and participant discussion. Attendees will come out of the course with real, practical, hands-on knowledge of how to start coding their own video games from scratch for desktop, web, mobile and beyond. You will not only gain a practical understanding of how games are made but also an insight into what to do with that knowledge; how to make games feel great to play and what makes games really tick.

***Also available as a two-day course at MadLab.***

## **vi BID WRITING**

Whether you're new to the bid-writing process or want to power or scale-up your applications, this course will equip you to win. You will understand every stage of the bid-writing process from identifying funds to delivering a winning bid, both in the wider strategic and policy contexts and at the nitty-gritty level of practical dos and don'ts.

***Also available as a one day course, led by Laura H. Drane.***

## 3 WORKSHOPS

*Our workshops offer the perfect introduction to need-to-know tech and are great for career development and exploring learning options. Courses can be expanded or shortened to your requirements. Get in touch and let us help you get the right training for your audience.*



### **i INTRODUCTION TO SOCIAL MEDIA**

Find out how to use social media for networking, communication and job searches, and create your own LinkedIn account. Running through the most popular online platforms for business today, including Facebook pages, Twitter, Instagram, Snapchat and LinkedIn, exploring how each can benefit an organisation differently.

## **ii SETTING UP YOUR FIRST WORDPRESS WEBSITE**

Create your first website using WordPress, learn about the differences between a page and a post, and add your first content. Through the course of the day we will take you through the essential aspects of WordPress. By the end of the day, you will have a basic website setup, including some content.

## **iii MAKING THE MOST OF WORDPRESS**

Handy tips on how to make the most of your first website, adding custom menus, using widgets, adding plugins and playing with themes. Over the course of the day you'll be shown how to get more functionality from your basic WordPress website.

## **iv NEXT STEPS WITH WORDPRESS**

Essential tips on how to make the most of your WordPress site, this course will show you how to add more functionality to your website. You will learn more advanced formatting techniques including adding dynamic content, how to use widgets to spice up your sidebar and the basics of working with Plugins.

## **v CONTENT, SEO & ANALYTICS FOR WORDPRESS**

Learn how to create engaging content for your readers, get your content optimised for search engines, and learn how to combine your WordPress website with Google Search Console and Analytics.

## **vi E-COMMERCE**

Learn how to build and develop your e-commerce site, develop a marketing strategy, and sell effectively online. We'll also explore plugins and SEO.

## **vii PROGRAMMING 101**

A whistle-stop tour of everything programming languages can do. This practical session will use Python - a language that's beginner-friendly, but presents enough of a challenge to be interesting. Think of it a bit like those bumper lanes at the ten-pin bowling alley!

## **viii MAKE A WEB APP WITH RUBY**

Learn how to make a simple 'to do list' app, that will give you the ability to add items to a list and mark them as done. Along the way you'll write some Ruby and JavaScript code, and get started with the Sinatra web framework, SQL database queries and some jQuery.

## **ix MAKE A WEB APP WITH JAVA**

This workshop will teach you Java development in the real world. Instead of the usual, "let's print something to the screen" tutorials, we're going to show you how it's used in the commercial world - and introduce you to some of the frameworks you might use.

## **x INTRO TO WEB DEVELOPMENT**

Learn how to make a simple two-page website using HTML and CSS, the building blocks of the web. Over the course of the day you will learn how to setup the fundamental building blocks of a web page. We will use HTML to provide basic structure and content, and then add in a bit of CSS to style your web pages.

## **xi BLOGGING 101**

Put your first website to good use and start blogging. Learn how to create engaging content for your readers. Over the course of workshop, we will show you how to create good quality, relevant content for your website. We will show you how to use Google Analytics and Google Search Console, and also get you SEO ready with some highly recommended plugins.

## **xii SEO**

In this session we explore the basics of search engine optimisation (SEO). When used effectively SEO makes you easier to find on the web, vastly increasing your website traffic and brand awareness. We will look at some of the core methods used to achieve these goals, including Google Search Console, website best practices, online tools such as Yoast SEO, and other tips and tricks to help you make the most of your platform.

### **xiii GOOGLE ANALYTICS**

Google Analytics is a powerful tool: when used in conjunction with engaging content and SEO practices, it can help your website and content reach a larger audience. Using the ABC's of web analysis we'll explore using Google Analytics to improve your online profile. This seminar will help you better understand who is viewing your website, where they come from, how they engage with your content, and how to effectively set and track 'goals' for your website.

### **xiv BUILD A BRAND**

We'll walk you through everything you need to establish yourself online and create your own 'brand guidelines'. You will look at establishing a mission, vision and personality, understanding your audience, and how to use appropriate tone and language, to the importance of developing a unique visual style, straplines and logos.

### **xv STAYING SAFE ONLINE**

This workshop focuses on cyber bullying, online shopping, radicalisation, eating disorders and protecting personal information and images. Parents, carers and youth workers bring their children's mobile phones, tablets and laptops to the sessions for hands-on help in setting up appropriate security and privacy settings to help keep their children safe.

### **xvi BASIC COMPUTER SKILLS**

Participants start with the very basics: how to turn on a computer, use the internet, search for websites, and construct basic Word documents and emails. Safety and security is also covered to dispel any myths and fears learners may have about using technology. Taught at the learners' pace, in a safe and supportive environment, Basic Computer Skills is particularly suited to seniors.

### **COURSES ALSO AVAILABLE IN:**

- AI
- Blockchain
- Projection Mapping
- Python
- Scratch
- Every programming language

## 4 EXPERIENTIAL/ MAKING SESSIONS

*MadFabLab is an official FabLab. What's a FabLab? It's a "globally-networked open-access digital fabrication laboratory (part of MIT's Centre for Bits and Atoms.)" Ours is the only FabLab in Manchester, and one of only two in Greater Manchester. Our making sessions are ideal for team building away-days, as team introductions to rapid-prototyping and the potential of making technology, or for trying new tech prior to investing. Talk to us about bringing these sessions to you.*



## **i INTRODUCTION TO LASER CUTTING**

Learn to add the personal touch in this two hour introduction to laser cutting. Starting with the basics of designing in Inkscape, you'll go on to create a beautiful, unique acrylic keyring, or wooden coaster tile, of your own design.

## **ii LASER CUT A 3D MODEL**

Learn to add the personal touch in this two hour introduction to 3D printing. Starting with the basic principles of 3D printing and design, you will design a 3D model, prepare a 3D file for printing and create your own 3D print on the Ultimaker 3 to take home.

## **iii INTRODUCTION TO SOLDERING**

If you want to learn electronics, soldering will become an essential skill fairly early on. In this introductory workshop you'll learn to solder a basic kit (Drawdio), as well as getting some background on the art of soldering. You'll leave with a completed, working kit and the knowledge to continue soldering on your own.

## **iv INTRODUCTION TO ARDUINO**

Arduino can be used to make all kinds of things, from tiny wearables to large-scale interactive installations. Versatile, beginner-friendly, and above all fun, this workshop will give you an insight into how to get started with your own excellent digital-physical projects.

***Also available: (v) Advanced Arduino***

## **v THE INTERNET OF THINGS**

This workshop will take you through the need-to-know essentials when tackling your own IOT project - from picking the right prototyping platform and means of device-device communication, through to the pros and cons of different network protocols and topologies.

***Also available: (vii) Advanced Internet of Things***

## **vi LEGO SERIOUS PLAY**

Run by Stuart Nolan, magician-in-residence at Watershed's Pervasive Media Studio in Bristol, Lego Serious Play is a facilitated meeting, communication and problem-solving process in which participants are led through a series of questions, probing gradually deeper into the subject. Participants build their own 3D Lego model in response to the facilitator's questions, which then serve as a basis for group discussion and decision-making.

***NB: Lego Serious Play price available on request***

## **vii 3D HEAD SCAN AND PRINT**

In this workshop, you'll have your head 3D scanned and 3D printed in miniature to use as a new Facebook profile picture, trinket on the mantelpiece, or as a keepsake! Feeling confident? Take the 3D scanning reins and scan your colleagues. Following this, we'll give you an overview on 3D printing and scanning, along with some knowledge that you can try at home.

***As 3D printing is a relatively long process, we'll print the heads and post them to you as soon as they are ready.***

## **viii CREATE YOUR OWN MIDI DEVICES**

Learn how to create your own midi controllers using Arduino on this half-day (4-hour) workshop!

Chris Ball (Arduino wonderkid) has used Arduino extensively to create MIDI faders, laser harps, a variety of theremins, and other bespoke devices. The Arduino project has brought open source electronics to the masses, aided by its low price and simplicity. If you'd like to get into using Arduino to create musical instruments, this is the course for you!

## **ix CREATIVE CODING WITH PROCESSING**

Learn the Java-based programming language Processing on this four-hour workshop, perfect for both artistic and educational purposes.

Creative technologist Chris Ball will take you through all the things you need to know to get you started with Processing and its many applications.

## **5 ADDITIONAL INFORMATION**

The duration of the workshop can be tailored to suit your requirements, the minimum for each being one hour. Many can be arranged as a drop-in session to run within a larger event, or as a package of workshops.

Facilitator times include travel, setup and clearing down. Drop-in workshops run for a length of time of your choosing. Please allow 1 hour for setup and 30 minutes for clearing down. Please also note facilitator costs are in addition to any material costs, dependant on the number of facilitators required and the length of activity.

Unless otherwise specified, computers/laptops are not provided. These can be hired from MadLab, or would need to be made available by the venue or provided by the learner. We would also require the venue to have open access to free wifi.

Workshops outside of Greater Manchester may also include travel and accommodation costs.

## **6 CANCELLATION POLICY**

In the event of cancellation, we cannot offer refunds with less than two weeks notice of the event and we will expect payment in full.

MadLab hires independent tutors to lead workshops, and as part of a fair working contract with them, we make sure that we give them notice of any changes. This policy ensures we can provide you with high quality tutors at all times.