

Learning to be an awesome web developer requires a lot of new concepts. To help bring it all together we have put together a pre-course plan to lay the foundations that we will build on in the course. It is split into 4 challenges, each with a submission deadline so we can monitor your progress and understand your current skill level in advance of the course starting.

Key dates for January 20 intake

	Bristol	London
Pre-course start date	23/12/19	17/12/19
Challenge 1 Submission Deadline	30/12/19	23/12/19
Challenge 2 Submission Deadline	10/1/20	3/1/20
Challenge 3 Submission Deadline	22/1/20	15/1/20
Course start date & Challenge 4 Submission Deadline	27/1/20	20/1/20

Some suggestions:

- Build stuff. The **most** important thing while learning to code is to write code. Just like learning to play guitar, you can't learn to code just by reading about it. It takes practice, lots of it (about 12 weeks by our calculations!).
- Follow along with the video, even if what is being shown seems trivial. It will cement the ideas in your memory if you physically type them out.
- Pause videos and go back when the concepts are going too fast. Make sure you **understand** what has been shown before continuing to the next concept.
- At this point, there is more value in learning 5 things properly than 50 things badly. Take your time.
- Don't be constrained to the videos that we suggest. If, for example you're struggling to understand JavaScript functions. Googling 'JavaScript Functions' would be a great start.
- Explore beyond where the videos take you. Be **curious** and create your own micro-challenges to check you understand. A really good test for this is to take someone you know that doesn't know code and explain it to them (if they're good don't forget to refer them to the course!).
- Dedicate blocks of 4 hours to work on course material. Every time you switch away to do something else you lose time while you switch context. If possible, spread your learning over multiple days so your brain has time to digest concepts overnight rather than cram it all into one day. It will be much less stressful and you'll get better results.

We have trawled the web on your behalf to find the best possible learning without actually being here with our trainers on the _nology course. There are some excellent resources such as 'The Net Ninja' that we thoroughly recommend, as his videos are free they are a great resource to take advantage of.

Typically we would expect a 1:2 ratio between watching and understanding. For example, for each hour of video, we would expect you to spend at least 2 hours to consolidate the concept fully. This is self-paced time, pausing videos, playing, exploring and expanding ideas.

Regardless of your experience, complete all the learning. We guarantee there will be things that you don't know and bad habits that need work on. Every day on the _nology course builds on the last, so if any concepts are missed it has a direct impact on later learning.

Remember - you'll be presenting your challenge output to the other students on the first day of the course so make it worth talking about!

Reflection questions

After each challenge, include in your submission the answers to the following questions

- What was the most interesting thing you learned?
- What was the most challenging thing you learned?
- What concepts do you feel need the most additional work when you start the course?

Kit

We provide all the kit you'll need on the _nology course. However, to write code you'll need something to practice on before the course starts. It can be a Mac or PC, anything less than 3 years old should be fine. You'll get a much better experience if it has 8GB of RAM or more. If you're interested, we use Lenovo L480 with 16GB RAM, i5 processor and 256GB SSD. Don't worry if you don't know what that means!

Challenge 1 - 8 hours

If you're new to web design / development & don't know where to start, what your app or website looks like is the perfect place. You'll learn about the fundamental principles of design

Watch this youtube playlist: [Pre-Course Learning - Design](#)

All timings are minimum expected.

Video learning: 2 hours over 17 videos

Consolidation: 2 hours

Challenge time: 4 hours

Challenge 1a:

Choose an existing website personal to you, write a critique of the design including potential improvements (500 words).

Challenge 1b:

Use your new found wireframing and design skills to design a personal website. We want to know about you, your background, your hobbies/interests and what you want to get out of this course. Think about what content is interesting for others to consume and how you would display it on your page.

You can either draw by hand or use an online tool such as <https://www.mockflow.com/> to produce your design.

Send either a link or photos of your output in your submission.

When complete, email your files to challenge@nology.io along with the standard challenge reflection questions above.

Challenge 2 - 16 hours

If you're new to web design / development & don't know where to start, HTML is the perfect place. HTML and CSS together form the building blocks with which to create websites and other more complex applications. In this course we'll cover everything you need to know to create a simple website from start to finish.

Once you've learned enough HTML to make simple websites, your next step is to jump head first into this CSS tutorial for beginners series. CSS stands for Cascading Style Sheets, and is the primary method of adding design to your HTML pages. In this course we'll be working our way through CSS core concepts such as formatting text, headers and links; positioning content on a web page using CSS positioning techniques, adding colour and backgrounds to our elements and much more...

Watch this youtube playlist: [HTML & CSS Crash Course Tutorial](#)

All timings are minimum expected.

Video learning: 4 hours over 11 videos

Consolidation: 6 hours

Challenge time: 4 hours

Challenge:

Build the website you sketched out in the previous challenge. Use CSS, semantic HTML and as many concepts as possible to apply the ideas in context. Extra points if looks different for mobile and desktop. When complete, email your files to challenge@nology.io along with the standard challenge reflection questions above.

Challenge 3 - 16 hours

Now that your web site looks great, it's time to add some interactivity. Join the Net Ninja to talk about modern JavaScript and how to manipulate web pages and make things a bit more fun.

Watch this youtube playlist: [Modern JavaScript Tutorial](#)

All timings are minimum expected.

Video learning: 5 hours over 6 videos

Consolidation: 7 hours

Challenge time: 4 hours

Challenge: Expand your 'About me' challenge you created last week to include a feature that demonstrates your new understanding of JavaScript. Demonstrate:

- Use of variables
- Use of functions
- Use of getting information from an input box
- Replaying dynamic information back to the user

When complete, email your files to challenge@nology.io along with the standard challenge reflection questions above.

Challenge 4 - 5 minutes

On the first day of your _nology course you will demo what you have built to your other students. Be ready! You have 5 minutes to show your learning and your approach. Then you will deploy it to a live server!