



THE  
**Northern  
Sydney  
Institute**  
Part of **TAFE**<sup>NSW</sup>

# Certificate IV Web-Based Technologies Web Programming and Design National Code ICT40315

## Hornsby Campus Information Technology

### Web Programming and Design

This course is best suited for people who would like to develop the skills and knowledge to **create engaging websites** using the **latest web technologies**. The course is delivered by experienced web designers who are specialists in the course content. The course includes **web design** and **web programming** and is nationally accredited.

### What will I be able to do after the course?

Completion of this certificate will provide you with the skills to apply for the Diploma in Web Development, or to work as a junior web designer/developer in industry.

After completing the course you will be able to **design, create and maintain web sites**. Including websites requiring **web programming in PHP and JavaScript**. You will be able to use **Photoshop** to design engaging layouts and create web pages in **HTML and CSS** based on requirements.

As well as creating functional websites you will also look at **selecting web hosting and search engine optimization (SEO)**. The web pages created will be accessible on a range of devices including **mobile devices**.

### What skills are required before I enrol?

To successfully participate in the Web Design and Development Certificate IV, you will need to have completed a Certificate III in Information, Digital Media and Technology or equivalent. The equivalent skills include:

- A very good knowledge of applications such as word processing, spread sheets and database
- A good knowledge of computer hardware
- Very good communication skills
- Be familiar with web technology including HTML, photo, web and internet knowledge
- Above-average typing skills.

### How long does this course take?

...and how much time do I need to put into it?

This course will take 18 weeks full-time or 36 weeks part-time. While you are studying you will need to spend some time outside of the classroom working on set work and assessments. This time will vary from week to week. Full-time study attendance is 18-20 hours/week with up to 20 hours of work outside of class. Flexible delivery is also available for students who need to complete the course in a combination of online and class attendance. Students enrolled in flexible delivery will be provided with all the course material online as well as access to teachers to assist with the course work.

### What costs are involved?

Fees are set by TAFE NSW and change each year. The fees can be viewed at

<http://www.nsi.tafensw.edu.au/Courses/EnrollingAndRegistering/FeesAndFinancialAssistance/Default.aspx>

## What will I learn?

Content covered in the course	Course Units
<p><b>Web page creation</b></p> <ul style="list-style-type: none"> <li>✓ Create websites using HTML and CSS</li> <li>✓ Optimise a website for better search engine rankings (SEO)</li> <li>✓ Create user-friendly web applications focused on the user experience</li> <li>✓ Create websites that are accessible</li> <li>✓ Use a web authoring tool to create websites</li> </ul>	<p>ICTWEB402 Confirm accessibility of websites for people with special needs</p> <p>ICTWEB409 Develop cascading style sheets</p> <p>ICTWEB410 Apply web authoring tool to convert client data for websites</p> <p>ICTWEB413 Optimise search engines</p> <p>ICTWEB429 Create a mark-up language document to specification</p>
<p><b>Web programming</b></p> <ul style="list-style-type: none"> <li>✓ Learn how to program in: <ul style="list-style-type: none"> <li>○ PHP</li> <li>○ JavaScript</li> <li>○ jQuery</li> </ul> </li> <li>✓ Create and access MySQL databases</li> <li>✓ This stream covers <ul style="list-style-type: none"> <li>○ PHP</li> <li>○ SQL</li> <li>○ Database design</li> <li>○ MySQL</li> <li>○ JavaScript</li> <li>○ jQuery</li> </ul> </li> </ul>	<p>ICTWEB411 Produce basic client-side script for dynamic web pages</p> <p>ICTWEB412 Produce interactive web animation</p> <p>ICTDMT402 Produce interactive animation</p> <p>ICTICT401 Determine and confirm client business requirements</p> <p>ICTWEB425 Apply structured query language to extract and manipulate data</p> <p>ICTWEB415 Produce server-side script for dynamic web pages</p> <p>ICTDBS403 Create basic databases</p> <p>ICTWEB421 Ensure website content meets technical protocols and standards</p>
<p><b>Web page design and layout</b></p> <ul style="list-style-type: none"> <li>✓ Design stylish website graphics using Photoshop</li> <li>✓ Learn the principles of beautiful web design</li> <li>✓ Create a working website to a technical specification, including all protocols and standards</li> <li>✓ Explore your obligations both legal and moral regarding copyright, ethics and privacy in websites</li> <li>✓ Work in a safe environment</li> </ul>	<p>ICTDMT401 Create visual design components for digital media</p> <p>ICTWEB414 Design simple web page layouts</p> <p>ICTWEB401 Design a website to meet technical requirements</p> <p>ICTICT418 Contribute to copyright, ethics and privacy in an IT environment</p> <p>BSBWHS304 Participate effectively in WHS communication and consultative processes</p>
<p><b>Content management systems and hosting</b></p> <ul style="list-style-type: none"> <li>✓ What to look for when choosing a web hosting company</li> <li>✓ Integrate social media</li> <li>✓ Customise content management system</li> </ul>	<p>ICTWEB403 Transfer content to a website using commercial packages</p> <p>ICTWEB424 Evaluate and select a web hosting service</p> <p>ICTWEB416 Customise content management system</p> <p>ICTWEB417 Integrate social web technologies</p>

## How will I be assessed?

For each stream you will need to complete some projects and tests. The projects and tests are spread over the length of the course. Each teacher will provide you with a semester schedule which lists the assessments and due dates.

## How do I enrol?

Visit <http://www.nsi.tafensw.edu.au/Courses/EnrollingAndRegistering/Default.aspx> (search for the Course Number **ICT40315**) for information on how to enrol.

## Where can I get more information?

Our website contains a lot of important information. <http://infotech.hornsby.tafensw.edu.au/>

If you need to ask questions please contact the course coordinator: **Ariane Warnant**

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