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| **ISCG6420:** | **INTERNET AND WEBSITE DEVELOPMENT** | | | | | |
| **Course number:** | | ISCG6420 | **Level:** | 6 | **Credits:** | 15 |
| **Main programme:** | | BCS | | | Elective | |  |
| **Pathway(s):** | |  | | | | |  |
| **Requisites / Restrictions:** | | Pre-requisites: (ISCG5422 or ISCG5236) and (ISCG5420 or ISCG5235)  Co-requisites: ISCG5430 or ISCG5237  Restrictions: ISCG6240 | | | | |
| **Other programmes:** | | DipITS, GDCMP | | | | |
| **NZSCED field of Study:** | |  | **Delivery mode:** |  | | |

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| **Hours directed:** | **Hours in the Workplace:** | **Hours Self-directed:** | **Total Learning Hours:** |
| 32.5 |  | 117.5 | 150 |

**Outcome Statement:**

To provide the students with knowledge of advanced concepts of the Internet and website design and development

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| **Learning Outcomes:**   |  | | --- | | **Learning Outcomes** | | 1. Explain and apply the fundamentals of CSS (Cascading Style Sheets). | | 2. Explain and apply the fundamentals of JavaScript. | | 3. Use current client-side website development languages/technologies create a complex commercial or educational website. | | 4. Use the features of Web/Multimedia authoring packages to create a complex commercial or educational website with effective navigational interface. | |

**Learning and Teaching:**

Lectures, tutorials and lab practical

Topics:

Topics include: advanced client side technologies to implement website designs, animations and communicate with the web server

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| **Expanded Outcomes** |
| **Outcome 1:**  Explain and apply the fundamentals of CSS.   * Explain Benefits of CSS. * Explain Standards of CSS. * Write complex CSS rules. * Apply CSS to a website appropriately. |
| **Outcome 2:**  Explain and apply the fundamentals of JavaScript.   * Use JavaScript Basics. * Work with DOM (Document Object Model). * Create Cross-Browser Scripts * Work with CSS. * Create JavaScript Animations |
| **Outcome 3:**  Use current client-side website development languages/technologies create a complex commercial or educational website.   * Explain and demonstrate how to implement client-side animations * Explain and demonstrate how to implement client-side functionalities. * Explain and demonstrate how to embed a client-side application on a webpage and communicate with the rest of the website. * Explain and demonstrate how to communicate with the server resources in client-side scripting. |
| **Outcome 4:**  Use the features of Web/Multimedia authoring packages to create a complex commercial or educational website with effective navigational interface.   * Demonstrate the principles of effective Web site design.   (Range: navigation, browser recognition, page re-direction, form validation, search and replace, includes, site search)   * Demonstrate the seamless use of multimedia elements in a complex Web page. (Range: text, background colour, graphics, GIF animation, Flash animation, sound, and video) * Create multiple Web pages including an effective navigational interface. * Present the website together with its promotional strategy. * Conduct user-testing sessions. |

Assessment:

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| **Weighting** | **Nature of assessment** | **Learning Outcomes** |
| 20% | Assignment – implementation of a simple website to demonstrate mastery of JavaScript and CSS | 1, 2 |
| 30% | Test – practical demonstration to demonstrate mastery of client side techniques | 3,4 |
| 50% | Project | 1, 2, 3, 4 |

**Learning resources required:**

A web server, internet access from Unitec and the following software:

* + Internet Explorer
  + Mozilla Firefox
  + Opera
  + Netscape
  + Macromedia Studio
  + Adobe Photoshop
  + Movie Maker
  + Goldwave
  + A Java IDE

**Learning resources recommended:**

**Other Programmes:**

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| DipITS | **Elective** | Pre-requisites: ISCG5423 and ISCG5422  Restrictions: ISCG6240 |
| GDCMP | **Elective** | Pre-requisites: (ISCG5422 or ISCG5236) and  (ISCG5420 or ISCG5235)  Restrictions: ISCG6240 |

**Version Tracking:**

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| *Version No.* | *Date of Change* | *Effective from* | *Approved by* | *Description of change* |
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