## Web 2 - Programming

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| *SMS Code* | IN612001 | *Directed Learning hours* | 60 |
| *Level* | 6 | *Workplace or Practical Learning hours* | 0 |
| *Credits* | 15 | *Self-Directed Learning hours* | 90 |
| Prerequisites | IN511001 | *Total Learning Hours* | 150 |
| *This course partially replaces IT224001*  *Name of other Programme: Bachelor of Information Technology (version 2)* | | | |

***Aims***

To give students a thorough introduction to modern techniques for adding programmed behaviours to web pages.

***Learning Outcomes***

At the successful completion of this course, students will be able to:

1. Explain the functions of, and relationships between, client and server hardware and software in the World Wide Web
2. Design usable and attractive interactive web sites following an appropriate software development methodology
3. Implement dynamic web activity using an industry-relevant development language
4. Add dynamic database functionality to an interactive web page using a database management system
5. Build appropriately secure websites

***Indicative Content***

* HTML basics
* HTML for interactive web pages
* Server- and client-side programming
* Basic database design principles
* Database communication
* Web usability and aesthetics
* Web application development process
* Session management
* Internet security

***Assessment***

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| **Assessment Activity** | **Weighting** | **Learning Outcomes** |
| Checkpoints | 20% |  |
| Assignment | 40% |  |
| Project | 40% |  |

***Resources***

**Required:**

No required text, students will be directed to online materials.