

**Competency Standards for National Skill Certificate – 4 in  
Web Design and Development in ICT Sector**

**Course Structure**

| SL                                      | Unit Code and Title |                                                                | UoC Level | Nominal (Hours) |
|-----------------------------------------|---------------------|----------------------------------------------------------------|-----------|-----------------|
| <b>Generic Competencies</b>             |                     |                                                                |           | <b>40</b>       |
| 1                                       | GU008L2V1           | Work in a team environment                                     | 2         | 20              |
| 2                                       | GU009L3V1           | Practice negotiation skill                                     | 3         | 20              |
| <b>Occupation Specific Competencies</b> |                     |                                                                |           | <b>320</b>      |
| 1                                       | OUWDF001L4V1        | Develop a dynamic website using server-side scripting language | 4         | 100             |
| 2                                       | OUWDF002L4V1        | Design and Administer database                                 | 4         | 50              |
| 3                                       | OUWDF003L4V1        | Develop website using CMS                                      | 4         | 80              |
| 4                                       | OUWDF004L4V1        | Host a website                                                 | 4         | 10              |
| 5                                       | OUWDF005L4V1        | Maintain and secure website                                    | 4         | 30              |
| 6                                       | OUWDF006L4V1        | Perform web analytics                                          | 4         | 30              |
| 7                                       | OUWDF007L4V1        | Use version control systems in web development environments    | 4         | 20              |
| <b>Total Nominal Learning Hours</b>     |                     |                                                                |           | <b>360</b>      |

## Units & Elements at Glance

### Generic Competencies

| Code         | Unit of Competency         | Elements of Competency                                                                                                                                                                                           | Duration (Hours) |
|--------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| GU008L2V1    | Work in a team environment | <ol style="list-style-type: none"><li>1. Define team role and scope</li><li>2. Identify individual role and responsibility</li><li>3. Participate in team discussions</li><li>4. Work as a team member</li></ol> | 20               |
| GU009L3V1    | Practice negotiation skill | <ol style="list-style-type: none"><li>1. Plan negotiations</li><li>2. Participate in negotiations</li></ol>                                                                                                      | 20               |
| Total Hours: |                            |                                                                                                                                                                                                                  | 40               |

## Occupation Specific Competencies

| Code                | Unit of Competency                                                                                             | Elements of Competency                                                                                                                                                                                                                                                | Duration (Hours) |
|---------------------|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| OUWDF001L4V1        | Develop a dynamic website using server-side scripting language (PHP/Python/JAVA/Asp.net/Ruby on rails/Node.js) | <ol style="list-style-type: none"> <li>1. Plan for apply server-side scripting language</li> <li>2. Apply server-side scripting language (PHP/Python/JAVA/Asp.net/Ruby/Node.js)</li> <li>3. Test the website</li> </ol>                                               | 100              |
| OUWDF002L4V1        | Design and Administer database                                                                                 | <ol style="list-style-type: none"> <li>1. Plan to design database</li> <li>2. Implement database</li> <li>3. Test the database</li> </ol>                                                                                                                             | 50               |
| OUWDF003L4V1        | Develop website using CMS                                                                                      | <ol style="list-style-type: none"> <li>1. Download and install the CMS</li> <li>2. Develop website using CMS</li> <li>3. Create rich content to website</li> <li>4. Test the website</li> </ol>                                                                       | 80               |
| OUWDF004L4V1        | Host a website                                                                                                 | <ol style="list-style-type: none"> <li>1. Select and configure the domain</li> <li>2. Select and configure the server</li> <li>3. Test the site</li> </ol>                                                                                                            | 10               |
| OUWDF005L4V1        | Maintain and secure website                                                                                    | <ol style="list-style-type: none"> <li>1. Identify security features</li> <li>2. Plan a backup for file system and database</li> <li>3. Design and apply security features</li> <li>4. Check security logs, monitor performance and report security status</li> </ol> | 30               |
| OUWDF006L4V1        | Perform web analytics                                                                                          | <ol style="list-style-type: none"> <li>1. Integrate web traffic monitoring tools</li> <li>2. Monitor and report web traffic</li> <li>3. Apply on-page SEO</li> <li>4. Test the site</li> </ol>                                                                        | 30               |
| OUWDF007L4V1        | Use version control systems in web development environments                                                    | <ol style="list-style-type: none"> <li>1. Prepare to use VCS</li> <li>2. Build files in VCS</li> <li>3. Check and finalize use of VCS</li> </ol>                                                                                                                      | 20               |
| <b>Total Hours:</b> |                                                                                                                |                                                                                                                                                                                                                                                                       | <b>320</b>       |