



Maldives National Skills Development Authority



National Competency Standard for Programming

Standard Code: SOC30S18V1

Qualification Name: National Certificate III in Programming
Qualification Code: SOC30SQ1L318

KEY FOR CODING

Coding Competency Standards and Related Materials

DESCRIPTION	REPRESENTED BY
Industry Sector as per ESC (Three letters)	Construction Sector (CON) Fisheries and Agriculture Sector (FNA) Transport sector (TRN) Tourism Sector (TOU) Social Sector (SOC) Foundation (FOU)
Competency Standard	S
Occupation with in a industry Sector	Two digits 01-99
Unit	U
Common Competency	1
Core Competency	2
Optional/ Elective Competency	3
Assessment Resources Materials	A
Learning Resources Materials	L
Curricula	C
Qualification	Q1, Q2 etc
MNQF level of Qualification	L1, L2 etc
Version Number	V1, V2 etc
Year of endorsement of standard, qualification	By two digits Example- 07

1. Endorsement Application for Qualification 01**2. NATIONAL CERTIFICATE III IN PROGRAMMING**

3. Qualification code: SOC30SQ1L318	Total Number of Credits: 42
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4. Purpose of the qualification

The holders of this qualification are expected to work as Beginner Programmers in companies or as a freelancer.

5. Regulations for the qualification

National Certificate III in Programming will be awarded to those who are competent in units 1+2+3+4+5+6+7+8+9+10

6. Schedule of Units

Unit Title	Unit Title	Code
1.	Work effectively in an information technology	SOC30S1U01V1
2.	Apply occupational health and safety procedures	SOC30S1U02V1
3.	Develop and practice negotiation skills	SOC30S1U03V1
4.	Solve problems related to work activities	SOC30S1U04V1
5.	Apply quality standards	SOC30S1U05V1
6.	Perform computer operations	SOC30S1U06V1
7.	Use relevant technologies	SOC30S1U07V1
8.	Use mathematical concepts and techniques	SOC30S1U08V1
9.	Apply introductory programming skills	SOC30S1U09V1
10.	Create basic databases	SOC30S1U10V1

7. Accreditation Requirements

The training provider should have a lab or similar training facility to provide the trainees with hands-on experience related to this qualification

8. Recommended Sequencing

As appearing under the section 06

1. Endorsement Application for Qualification 02**2. NATIONAL CERTIFICATE IV IN PROGRAMMING-WEB APPLICATION DEVELOPER**

3. Qualification code: SOC30SQ2L418	Total Number of Credits: 138
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4. Purpose of the qualification

The holders of this qualification are expected to work as Web Application Developers in companies or as a freelancer.

5. Regulations for the qualification

National Certificate IV in Programming – Web Application Developer will be awarded to those who are competent in units 1+2+3+4+5+6+7+8+9+10+11+12+13+14+15+16+17+18+19+20+21+22+23

6. Schedule of Units

Unit Title	Unit Title	Code
1.	Work effectively in an information technology	SOC30S1U01V1
2.	Apply occupational health and safety procedures	SOC30S1U02V1
3.	Develop and practice negotiation skills	SOC30S1U03V1
4.	Solve problems related to work activities	SOC30S1U04V1
5.	Apply quality standards	SOC30S1U05V1
6.	Perform computer operations	SOC30S1U06V1
7.	Use relevant technologies	SOC30S1U07V1
8.	Use mathematical concepts and techniques	SOC30S1U08V1
9.	Apply introductory programming skills	SOC30S1U09V1
10.	Create basic databases	SOC30S1U10V1
11.	Lead workplace communication	SOC30S2U01V1
12.	Lead small teams	SOC30S2U02V1
13.	Develop a micro business proposal	SOC30S2U03V1
14.	Build client relationships and business networks	SOC30S2U04V1
15.	Apply mathematical techniques for software	SOC30S2U05V1
16.	Perform programming in Python	SOC30S2U06V1
17.	Perform Programming in HTML5 with CSS3	SOC30S2U07V1
18.	Perform Programming using JavaScript	SOC30S2U08V1
19.	Perform programming by using JQuery	SOC30S2U09V1
20.	Use structured query language	SOC30S2U10V1
21.	Perform relational database management in SQL	SOC30S2U11V1
22.	Authentication & Authorization: OAuth	SOC30S2U12V1
23.	Full Stack Foundations	SOC30S2U13V1

7. Accreditation Requirements	The training provider should have a lab or similar training facility to provide the trainees with hands-on experience related to this qualification
8. Recommended Sequencing	As appearing under the section 06

UNIT DETAILS

Unit Title	Unit Title	Code	Level	No of credits
1.	Work effectively in an information technology environment	SOC30S1U01V1	3	2
2.	Apply occupational health and safety procedures	SOC30S1U02V1	3	2
3.	Develop and practice negotiation skills	SOC30S1U03V1	3	3
4.	Solve problems related to work activities	SOC30S1U04V1	3	3
5.	Apply quality standards	SOC30S1U05V1	3	3
6.	Perform computer operations	SOC30S1U06V1	3	5
7.	Use relevant technologies	SOC30S1U07V1	3	3
8.	Use mathematical concepts and techniques	SOC30S1U08V1	3	5
9.	Apply introductory programming skills	SOC30S1U09V1	3	8
10.	Create basic databases	SOC30S1U10V1	3	8
11.	Lead workplace communication	SOC30S2U01V1	4	3
12.	Lead small teams	SOC30S2U02V1	4	3
13.	Develop a micro business proposal	SOC30S2U03V1	4	3
14.	Build client relationships and business networks	SOC30S2U04V1	4	3
15.	Apply mathematical techniques for software development	SOC30S2U05V1	4	10
16.	Perform programming in Python	SOC30S2U06V1	4	10
17.	Perform Programming in HTML5 with CSS3	SOC30S2U07V1	4	8
18.	Perform Programming using JavaScript	SOC30S2U08V1	4	10
19.	Perform programming by using JQuery	SOC30S2U09V1	4	8
20.	Use structured query language	SOC30S2U10V1	4	10
21.	Perform relational database management in SQL database technology	SOC30S2U11V1	4	10
22.	Authentication & Authorization: OAuth	SOC30S2U12V1	4	8
23.	Full Stack Foundations	SOC30S2U13V1	4	10

Packaging of National Qualifications:

National Certificate III in Programming will be awarded to those who are competent in units
1+2+3+4+5+6+7+8+9+10

Qualification Code: SOC30SQ1L318

National Certificate IV in Programming-Web Application Developer will be awarded to those who are
competent in units 1+2+3+4+5+6+7+8+9+10+11+12+13+14+15+16+17+18+19+20+21+22+23

Qualification Code: SOC30SQ2L418

Competency Standard for

PROGAMMING, WEB APPLICATION DEVELOPER

Unit No	Unit Title
1.	Work effectively in an information technology environment
2.	Apply occupational health and safety procedures
3.	Develop and practice negotiation skills
4.	Solve problems related to work activities
5.	Apply quality standards
6.	Perform computer operations
7.	Use relevant technologies
8.	Use mathematical concepts and techniques
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22.	Authentication & Authorization: OAuth
23.	Full Stack Foundations