

# Course Structure

## Bachelor of Computer Science

Faculty of Engineering, Science and Technology



### Semester 1

| Type                  | Code   | Name  | Prerequisites | Credit Points | Fee (MVR)    |
|-----------------------|--------|---|---------------|---------------|--------------|
| CORE                  | CPT111 | Introduction to Programming                   | Nil           | 15            | 1,245        |
| CORE                  | DHI113 | Dhivehi for Professionals                     | Nil           | 15            | 870          |
| CORE                  | MAT129 | Pure Mathematics                              | Nil           | 15            | 1,245        |
| CORE                  | PHY101 | Physics: Mechanics, waves and electrodynamics | Nil           | 15            | 1,245        |
| <b>Semester Total</b> |        |   |               | <b>60</b>     | <b>4,605</b> |

### Semester 2

| Type                  | Code   | Name                        | Prerequisites | Credit Points | Fee (MVR)    |
|-----------------------|--------|-----------------------------|---------------|---------------|--------------|
| CORE                  | CPT149 | Introduction to Networking  | Nil           | 15            | 1,245        |
| CORE                  | CPT205 | Object Oriented Programming | CPT111        | 15            | 1,245        |
| CORE                  | MAT103 | Discrete Mathematics        | Nil           | 15            | 1,245        |
| CORE                  | PHY205 | Digital Circuits            | Nil           | 15            | 1,245        |
| <b>Semester Total</b> |        |                             |               | <b>60</b>     | <b>4,980</b> |

### Semester 3

| Type                  | Code   | Name                           | Prerequisites  | Credit Points | Fee (MVR)    |
|-----------------------|--------|--------------------------------|----------------|---------------|--------------|
| CORE                  | CPT203 | Data Structures and Algorithms | MAT103, CPT205 | 15            | 1,245        |
| CORE                  | CPT211 | Database Systems               | Nil            | 15            | 1,245        |
| CORE                  | CPT239 | Operating Systems              | CPT111         | 15            | 1,245        |
| CORE                  | PHY215 | Electronics for Robotics       | PHY205         | 15            | 1,245        |
| <b>Semester Total</b> |        |                                |                | <b>60</b>     | <b>4,980</b> |

## Semester 4

| Type                  | Code   | Name  | Prerequisites | Credit Points | Fee (MVR)    |
|-----------------------|--------|---|---------------|---------------|--------------|
| CORE                  | CPT229 | Advanced Networking                           | CPT149        | 15            | 1,245        |
| CORE                  | CPT241 | Advanced Data Structures & Algorithm Analysis | CPT203        | 15            | 1,245        |
| CORE                  | CPT243 | Computer Organization & Architecture          | CPT111        | 15            | 1,245        |
| CORE                  | CPT245 | Software Engineering                          | CPT111        | 15            | 1,245        |
| <b>Semester Total</b> |        |   |               | <b>60</b>     | <b>4,980</b> |

## Semester 5

| Type                  | Code   | Name                                | Prerequisites             | Credit Points | Fee (MVR)    |
|-----------------------|--------|-------------------------------------|---------------------------|---------------|--------------|
| CORE                  | CPT313 | Advanced Database Management System | CPT147                    | 15            | 1,245        |
| CORE                  | CPT315 | Web Technologies                    | CPT111                    | 15            | 1,245        |
| CORE                  | CPT317 | Artificial Intelligence             | CPT241, CPT205, CPT111    | 15            | 1,245        |
| CORE                  | CPT337 | Applied CS Project                  | Completion of 180 credits |               | 1,245        |
| <b>Semester Total</b> |        |                                     |                           | <b>225</b>    | <b>4,980</b> |

## Semester 6

| Type                  | Code   | Name                                   | Prerequisites  | Credit Points | Fee (MVR)    |
|-----------------------|--------|--|----------------|---------------|--------------|
| CORE                  | CPT333 | Cryptography & Networking Security     | MAT129, CPT205 | 15            | 1,245        |
| CORE                  | CPT337 | Applied CS Project (continue)          | Nil            | 30            | 1,245        |
| CORE                  | CPT303 | Multimedia Technology and Applications | Nil            | 15            | 1,245        |
| ELECTIVE              |        | Electives                              | Nil            | 15            | 1,245        |
| <b>Semester Total</b> |        |  |                | <b>75</b>     | <b>4,980</b> |

## Elective

| Type                | Code   | Name                                 | Prerequisites | Credit Points | Fee (MVR)     |
|---------------------|--------|--------------------------------------|---------------|---------------|---------------|
| ELECTIVE            | CPT327 | Human Computer Interaction           | Nil           | 15            | 1,245         |
| ELECTIVE            | CPT339 | Logical and Physical Database design | CPT211        | 15            | 1,245         |
| <b>Course Total</b> |        |                                      |               | <b>360</b>    | <b>29,505</b> |

Fees stated above are tuition fee for local students. Fee for international students on student visa is five times the stated fees. Fee for workpermit holders and students on dependent visa is same as the fees for local students. All fees are quoted in MVR.

While every reasonable effort has been exerted to ensure the accuracy of the fees published by the Maldives National University, it is important to note that the University reserves the prerogative to modify fees without prior notification, whether prompted by altered circumstances or otherwise. Applicants are hereby alerted to the fact that the outlined plans for various courses (including but not limited to lecturers and terms) as disclosed in the University's publications are indicative of intent. Such representations shall not be construed as constituting a binding offer or covenant for which the University assumes liability. Should you desire to pursue a specific subject as an elective, it is incumbent upon you to verify its availability in the respective term. In the event of any verbal communication from a University representative conflicting with a document officially published by the University, the latter shall be deemed authoritative.