# NextGen 2.0 Cardano Development Curriculum

#### Module 1: Introduction to Cardano Development.

- 1.0. Understanding the Cardano Blockchain and its Architecture.
- 1.1. Cardano eUTxO Model
- 1.2. Cardano DApp Architecture
- 1.3. Cardano Development Stacks (Aiken, Plutus, Plu-Ts, Helios)
- 1.4. Datums and Redeemers
- 1.5. Aiken DSL and Developer Environment setup Support Material

### **Module 2: Aiken Intensive (Part 1)**

- 2.0. Aiken Data Types (Primitives; Custom Types)
- 2.1. Aiken Functions
- 2.2. Aiken Constants
- 2.3. Control Flow
- 2.4. Aiken Standard Library; Utility Functions
- 2.5. Aiken validators Intro
- 2.6. Hello world Aiken Program; Always True Validator Support Material

## Module 3: Aiken Intensive (Part 2)

- 3.0. Aiken Testing and Debugging
- 3.1. Aiken Validators (Mint and Spend Handlers)
- 3.2. Vesting Contract in Aiken
- 3.3. Minting Contract in Aiken
- 3.4. One-shot Minting Policy

**Support Material** 

# Module 4: Front-end integration with Mesh JS

4.0. Integrating vesting and minting Aiken contract code with mesh js

- 4.1. Interacting with wallets
- 4.2. Creating and submitting transactions
- 4.3. Locking and unlocking funds in vesting contract
- 4.4. Minting tokens to wallet

#### Exercises