

“ Fundamentals and Core Modules as Micro Credentials”

SUSTAINABLE GREEN ECONOMY MICRO -CREDENTIALS



THREE PILLARS FOR
SUSTAINABLE DEVELOPMENT

FIX THE SUSTAINABLE DEVELOPMENT GAPS WITH A GREEN JOB

“WHAT WAS THE FUNDAMENTAL INTENT OF THE SUSTAINABLE DEVELOPMENT GOALS”

The fundamental intent of the Sustainable Development Goals (SDGs) is to create a universal blueprint for ending poverty, protecting the planet, and ensuring peace and prosperity :

AU.Fundamentals and “Cure Model”

Core Purpose of the SDGs

The SDGs, adopted by all United Nations Member States in 2015, were designed to:

- **End poverty and hunger in all forms and dimensions**, ensuring that no one is left behind.
- **Promote inclusive and sustainable economic growth**, full and productive employment, and decent work for all.
- **Protect the planet** by addressing climate change, preserving biodiversity, and promoting sustainable use of natural resources.
- **Foster peace, justice, and strong institutions**, ensuring access to justice and accountable governance.
- **Ensure universal access to quality education, healthcare, clean water, and sanitation**, especially for the most vulnerable.
- **Advance gender equality and empower all women and girls**, recognizing their central role in development.
- **Encourage global partnerships** to mobilize the resources, innovation, and cooperation needed to achieve these goals.

A Universal, Integrated Agenda

The SDGs are:

- **Universal:** Applicable to all countries, regardless of income level.
- **Integrated:** Recognizing that progress in one area (e.g., health) is linked to others (e.g., education, environment).
- **Inclusive:** Centered on equity, participation, and leaving no one behind.

They build on the Millennium Development Goals (MDGs) [Sustainable Development pscg.global](https://www.pscg.global) Map green jobs into the Sustainable Development Goals (SDGs) using your “fundamental” and “cure” module framework. This dual-layered approach is brilliant for curriculum design and summit messaging—“fundamental” modules anchor the SDG’s core intent, while “cure” modules address the crisis symptoms or gaps that green jobs can solve.

SDG 1: No Poverty, using your “Fundamental” and “Cure” categories as dual pathways to address systemic poverty through skills, dignity, and mobility.

SDG 1 Credentialing Framework: Modules, Levels, and Credits

Category	Module Title	Level	Credits	Purpose
Fundamental	Community-Based Renewable Energy Technician	Level 2–4	20–40	Equip local youth and informal workers with solar, wind, and microgrid installation skills
	Urban Farming & Agroecology Facilitator	Level 2–4	20–40	Promote food sovereignty, permaculture, and climate-smart agriculture in urban and peri-urban zones
Fundamental	Circular Economy Waste Sorter & Upcycler	Level 2–3	15–30	Enable dignified livelihoods in waste valorization, sorting, and upcycling
Cure	Informal Sector RPL Navigator	Level 4–5	25–40	Guide workers through Recognition of Prior Learning pathways and credentialing systems
Cure	Green Micro-Enterprise Mentor	Level 4–5	30–45	Support small-scale entrepreneurs in sustainable business planning, access to finance, and market linkage
Cure	Climate Resilience Livelihood Coach	Level 4–6	30–50	Build adaptive capacity in vulnerable communities through livelihood diversification and resilience planning

Design Notes

- **Fundamental Modules:** Entry-level to intermediate, focused on direct poverty alleviation through skill-building and dignified work.
- **Cure Modules:** Intermediate to advanced, focused on systemic change, mentorship, and enabling others to navigate credentialing and resilience pathways.
- **Credits:** Aligned with ACQF/QCTO standards; stackable toward full qualifications or micro-pathways.
- **RPL-Friendly:** All modules include visual badge anatomy, progression maps, and portfolio-based assessment options.
- **Delivery:** Modular, blended, and community-anchored. Ideal for SEZ pilots, summit showcases, and coalition rollout.

SDG 2: Zero Hunger credentialing framework using your “Fundamental” and “Cure” module categories. This structure supports both immediate food system transformation and long-term sovereignty and resilience.

SDG 2 Credentialing Framework: Modules, Levels, and Credits

Category	Module Title	Level	Credits	Purpose
Fundamental	Regenerative Agriculture Specialist	Level 3–5	25–40	Train practitioners in soil regeneration, agroforestry, and carbon-sequestering farming methods
	Soil Health & Composting Technician	Level 2–4	20–35	Build capacity in composting, microbial soil analysis, and organic inputs
Fundamental	Aquaponics & Hydroponics Operator	Level 3–5	25–40	Equip learners with water-efficient, urban-friendly food production systems
Cure	Drought-Resilient Crop Advisor	Level 4–6	30–45	Guide communities in selecting, cultivating, and rotating climate-adapted crops
Cure	Food Sovereignty Mobilizer	Level 4–6	30–50	Mobilize local food systems, seed banks, and policy advocacy for community control over food
Cure	Post-Harvest Loss Reduction Agent	Level 3–5	25–40	Reduce food waste through improved storage, processing, and value-chain interventions

Design Principles

- **Fundamental Modules:** Focus on hands-on, scalable food production and soil stewardship.
- **Cure Modules:** Address systemic barriers—climate shocks, policy gaps, and value-chain inefficiencies.
- **Credits:** Modular and stackable, aligned with ACQF and QCTO referencing for cross-national mobility.
- **Assessment:** RPL-friendly, with visual badge anatomy, dashboard integration, and portfolio-based evidence.
- **Delivery:** Community-anchored, blended, and ideal for SEZ pilots, youth hubs, and summit showcases.

SDG 3.4 and SDG 5 credentialing frameworks should integrate health promotion and gender equality into modular, stackable learning aligned with occupational pathways. While no universal framework currently exists, here's how you can structure modules, levels, and credits for summit-ready credentialing aligned to AU, QCTO, and ACQF standards:

▮ SDG 3.4: Mental Health & Well-being Credentialing

Goal 3.4 aims to reduce premature mortality from non-communicable diseases and promote mental health. Credentialing should reflect psychosocial, community health, and resilience-building roles.

▮ Suggested Modules

- *Community Mental Health Advocacy*
- *Psychosocial First Aid & Trauma Support*
- *Youth & Elder Care Facilitation*
- *Substance Abuse Prevention & Recovery Navigation*
- *Well-being Promotion in Schools & Workplaces*

Levels & Credits

Level	Description	Credit Range	ACQF/QCTO Alignment
Level 1	Awareness & Peer Support	5–10 credits	Entry-level, RPL-friendly
Level 2	Facilitator & Outreach Worker	10–20 credits	Occupational Certificate
Level 3	Program Coordinator	20–40 credits	Advanced, stackable
Level 4	Policy & Systems Advocate	40+ credits	Cross-sectoral mobility

SDG 5: Gender Equality Credentialing

Goal 5 focuses on ending discrimination, violence, and promoting leadership for women and girls. Credentialing should empower roles in advocacy, protection, and inclusive leadership.

▮ Suggested Modules

- *Gender-Based Violence (GBV) Response & Referral*
- *Inclusive Leadership & Gender Mainstreaming*
- *Legal Rights & Policy Navigation*
- *Safe Spaces Facilitation & Community Mobilization*
- *Intersectional Advocacy (Youth, Disability, LGBTQIA+)*

▮ Levels & Credits

Level	Description	Credit Range	ACQF/QCTO Alignment
Level 1	GBV Awareness & Peer Educator	5–10 credits	RPL-accessible
Level 2	Gender Justice Facilitator	10–20 credits	Occupational Certificate
Level 3	Program Manager & Trainer	20–40 credits	Stackable with SDG 3.4
Level 4	Policy Advisor & Coalition Builder	40+ credits	AU/UN80 endorsement-ready

▮ Integration Tips for Summit Credentialing

- **Use badge anatomy** to visualize modules, levels, and credits.
- **Embed RPL pathways** for informal caregivers, peer educators, and community mobilizers.
- **Design dashboards** to show progression from local action to continental impact.
- **Align with ACQF descriptors** for transparency and mobility.
- **Prototype cross-SDG roles**, e.g., *Gender-Sensitive Mental Health Facilitator*.

SDG 6 Credentialing Framework: Modules, Levels, and Credits

Category	Module Title	Level	Credits	Purpose
Fundamental	Eco-Sanitation System Installer	Level 2–4	20–35	Train workers to install and maintain dry toilets, biodigesters, and decentralized sanitation systems
	Water Quality Monitoring Technician	Level 3–5	25–40	Equip learners to test, record, and report water safety using low-cost and digital tools
Fundamental	Wetland Restoration Worker	Level 2–4	20–35	Build capacity in rehabilitating wetlands for biodiversity, flood control, and water purification
Cure	Wastewater-to-Energy Innovator	Level 5–6	35–50	Develop solutions that convert wastewater into biogas, fertilizer, or clean water through circular systems
Cure	Community Water Steward	Level 4–6	30–45	Mobilize communities to manage water resources, advocate for access, and monitor usage equitably
Cure	Flood Mitigation Infrastructure Aide	Level 3–5	25–40	Support planning and maintenance of flood barriers, drainage systems, and nature-based

Category	Module Title	Level	Credits	Purpose
----------	--------------	-------	---------	---------

solutions

Design Highlights

- **Fundamental Modules:** Entry-to-mid level, focused on service delivery, ecological restoration, and monitoring.
- **Cure Modules:** Advanced, focused on innovation, governance, and infrastructure resilience.
- **Credits:** Stackable and aligned with ACQF/QCTO referencing; ideal for cross-border mobility and SEZ pilots.
- **Assessment:** RPL-integrated, with badge anatomy, dashboard legends, and visual progression maps.
- **Delivery:** Modular, blended, and community-anchored—ready for summit showcases and coalition rollout.

SDG 7: Affordable and Clean Energy credentialing framework, structured with your “Fundamental” and “Cure” module logic to support both technical deployment and systemic transformation in energy access and equity.

SDG 7 Credentialing Framework: Modules, Levels, and Credits

Category	Module Title	Level	Credits	Purpose
☀️☐ Fundamental	Solar PV Installer & Maintainer	Level 2–4	20–35	Train technicians to install, maintain, and troubleshoot solar photovoltaic systems for homes, schools, and micro-enterprises
☐ Fundamental	Microgrid Technician	Level 3–5	25–40	Equip learners to design, operate, and maintain decentralized energy systems for off-grid or weak-grid communities
☐ Fundamental	Energy Efficiency Auditor	Level 3–5	20–35	Build capacity to assess and improve energy use in buildings, appliances, and industrial processes
☐ Cure	Off-Grid Energy Access Facilitator	Level 4–6	30–45	Mobilize communities, map energy needs, and coordinate inclusive deployment of off-grid solutions
☐ Cure	Battery Recycling & Repurposing Agent	Level 3–5	25–40	Enable circular economy practices through safe collection, testing, and reuse of energy storage systems

Category	Module Title	Level	Credits	Purpose
□ □ Cure	Energy Justice Advocate	Level 4–6	30–50	Champion equitable energy access, policy reform, and community-led energy governance

Design Insights

- **Fundamental Modules:** Focused on technical competencies for immediate deployment and maintenance of clean energy systems.
- **Cure Modules:** Address systemic barriers—access, equity, circularity, and community empowerment.
- **Credits:** Stackable, modular, and aligned with ACQF and QCTO referencing for cross-border recognition.
- **Assessment:** RPL-integrated with visual badge anatomy, dashboard legends, and portfolio-based evidence.
- **Delivery:** Blended, community-anchored, and ideal for SEZ pilots, youth energy hubs, and summit showcases.

SDG 8: Decent Work and Economic Growth credentialing framework, to uplift informal workers, green sectors, and mobility systems through both foundational skills and systemic transformation.

SDG 8 Credentialing Framework: Modules, Levels, and Credits

Category	Module Title	Level	Credits	Purpose
Fundamental (e.g. Rammed Earth, Bamboo)	Green Construction Worker	Level 2–4	20–35	Train workers in sustainable building techniques using local, low-carbon materials
	Fundamental Eco-Tourism Guide	Level 3–5	25–40	Equip guides to deliver culturally respectful, environmentally conscious tourism experiences
Fundamental	Sustainable Logistics Coordinator	Level 3–5	25–40	Build capacity in green supply chain planning, last-mile delivery, and carbon tracking
Cure	Informal Worker Credentialing Agent	Level 4–6	30–45	Support RPL navigation, badge issuance, and referencing for informal sector workers
Cure	Green Job Incubator Facilitator	Level 4–6	30–50	Mentor youth and women in launching micro-enterprises and accessing green job

Category	Module Title	Level	Credits	Purpose
Cure	Occupational Mobility	Level	35–50	pathways
	Dashboard Analyst	5–6		Analyze labor data, visualize progression maps, and inform policy for cross-sector mobility

Design Highlights

- **Fundamental Modules:** Focused on dignified, green employment in construction, tourism, and logistics.
- **Cure Modules:** Focused on enabling systems—credentialing, incubation, and data-driven mobility.
- **Assessment:** RPL-integrated, with badge anatomy, dashboard legends, and portfolio-based evidence.
- **Delivery:** Community-anchored, blended, and ideal for SEZ pilots, summit showcases, and coalition rollout.

SDG 9: Industry, Innovation and Infrastructure credentialing framework, structured to catalyze green industrial transformation and infrastructure equity through both foundational skills and systemic innovation.

SDG 9 Credentialing Framework: Modules, Levels, and Credits

Category	Module Title	Level	Credits	Purpose
Fundamental	Circular Manufacturing Technician	Level 3–5	25–40	Train workers in resource-efficient production, remanufacturing, and closed-loop systems
Fundamental	Green Building Retrofitting Specialist	Level 3–5	25–40	Equip learners to upgrade existing infrastructure with energy-efficient, low-carbon solutions
Fundamental	Sustainable Transport Planner	Level 4–6	30–45	Build capacity in multimodal transport design, emissions reduction, and inclusive mobility systems
Cure	Eco-Industrial Park Coordinator	Level 5–6	35–50	Facilitate industrial symbiosis, shared infrastructure, and circular resource flows in industrial zones
Cure	Green Innovation Lab Facilitator	Level 4–6	30–45	Mentor youth and entrepreneurs in prototyping, testing, and scaling green technologies

Category	Module Title	Level	Credits	Purpose
Cure	Carbon Accounting & Reporting Agent	Level 4–6	30–50	Enable transparent emissions tracking, ESG reporting, and compliance with climate standards

Design Highlights

- **Fundamental Modules:** Focused on technical competencies for circular production, infrastructure retrofitting, and transport planning.
- **Cure Modules:** Focused on systemic enablers—innovation ecosystems, industrial coordination, and climate accountability.
- **Credits:** Modular and stackable, aligned with ACQF and QCTO referencing for cross-border recognition.
- **Assessment:** RPL-integrated, with badge anatomy, dashboard legends, and portfolio-based evidence.
- **Delivery:** Blended, community-anchored, and ideal for SEZ pilots, summit showcases, and coalition rollout.

SDG 10 credentialing should scaffold inclusive roles that reduce inequality within and among countries, with modular pathways for advocacy, data stewardship, and inclusive service delivery.

▮ SDG 10: Reduced Inequalities Credentialing Framework

Goal 10 targets social, economic, and political inclusion, especially for marginalized groups. Credentialing should empower roles in data equity, inclusive policy, and community mobilization.

▮ Suggested Modules

- *Equity & Inclusion Advocacy*
- *Migration & Refugee Support Services*
- *Disability Rights & Accessibility Facilitation*
- *Inclusive Data Collection & Analysis*
- *Social Protection Navigation*
- *Anti-discrimination Policy Implementation*
- *Community Dialogue & Participatory Governance*

▮ Levels & Credits

Level	Role Focus	Credit Range	ACQF/QCTO Alignment
Level 1	Inclusion Peer Educator	5–10 credits	RPL-accessible, entry-level
Level 2	Community Inclusion Facilitator	10–20 credits	Occupational Certificate
Level 3	Inclusive Program Coordinator	20–40 credits	Stackable, cross-sectoral
Level 4	Policy Advisor & Data Equity Analyst	40+ credits	AU/UN80 endorsement-ready

Integration Strategies for Summit Credentialing

- **Use badge anatomy** to visualize inclusion roles across migration, disability, and social protection.
- **Embed RPL pathways** for informal workers, migrants, and community leaders.
- **Design dashboards** to show progression from local inclusion efforts to continental policy impact.
- **Align with ACQF descriptors** for transparency and mobility across borders.
- **Prototype cross-SDG roles**, e.g., *Inclusive Health Navigator* (SDG 3 + SDG 10) or *Gender-Inclusive Data Steward* (SDG 5 + SDG 10).

• **SDG 11: Sustainable Cities and Communities credentialing framework**, structured to support both foundational urban sustainability roles and systemic resilience-building through your “Fundamental” and “Cure” module logic.

SDG 11 Credentialing Framework: Modules, Levels, and Credits

Category	Module Title	Level	Credits	Purpose
Fundamental	Urban Greening & Permaculture Worker	Level 2–4	20–35	Train workers in rooftop gardens, tree planting, and regenerative landscaping for urban biodiversity
	Sustainable Mobility Operator (e.g. Bike Share, EV)	Level 3–5	25–40	Equip learners to manage, maintain, and promote low-carbon transport systems in cities
	Waste-to-Resource Technician	Level 2–4	20–35	Build capacity in urban waste sorting, composting, and upcycling for circular city economies

Category	Module Title	Level	Credits	Purpose
Cure	Climate Migration Resettlement Planner	Level 4–6	30–50	Support dignified relocation and integration of climate-displaced populations through inclusive planning
Cure	Community Resilience Mapper	Level 4–6	30–45	Map vulnerabilities, assets, and adaptive capacities to guide urban resilience strategies
Cure	Green Infrastructure Maintenance Crew	Level 3–5	25–40	Maintain bioswales, green roofs, permeable pavements, and other nature-based urban infrastructure

- **Fundamental Modules:** Focused on hands-on urban sustainability roles that create dignified work and improve livability.
- **Cure Modules:** Address systemic urban challenges—climate displacement, resilience planning, and infrastructure upkeep.
- **Assessment:** RPL-integrated, with badge anatomy, dashboard legends, and portfolio-based evidence.

SDG 12-aligned credentialing frameworks typically use modular structures, NQF-referenced levels, and credit systems to formalize learning in sustainable consumption and production. These elements ensure stackability, comparability, and recognition across institutions and borders.

Modular Structure

- **Modules** represent discrete learning units focused on specific competencies, such as:
 - *Circular economy principles*
 - *Waste minimization and resource efficiency*
 - *Sustainable procurement and life-cycle analysis*
- Each module is designed to be *standalone yet stackable*, allowing learners to build toward full qualifications or occupational badges.
- Modules may be grouped into *part-qualifications* or *micro-credentials* for targeted roles (e.g., “Green Logistics Coordinator” or “Sustainable Packaging Technician”).

NQF-Referenced Levels

- Modules are pegged to **National Qualifications Framework (NQF)** levels to indicate complexity and depth:
 - **Level 1–4:** Foundational and entry-level roles (e.g., community recycling assistants)
 - **Level 5–6:** Intermediate technical roles (e.g., eco-auditors, sustainable supply chain officers)

- **Level 7–8:** Advanced strategic roles (e.g., sustainability managers, circular economy analysts)
- This referencing ensures *comparability and portability* across countries and sectors [SAQA South African Government](#).

Credit System

- Credits reflect the **notional hours** required to achieve learning outcomes:
 - *1 credit = 10 notional hours* (including study time, assignments, and assessments)
 - A typical module might carry **12 credits**, equating to **120 hours** of learning [unisa.ac.za](#).
- Full qualifications (e.g., Higher Certificate or Diploma) may require:
 - **120 credits** (e.g., 10 modules of 12 credits each)
 - **360 credits** for a Bachelor’s degree (e.g., 30 modules of 12 credits)

SDG 13: Climate Action credentialing framework, structured to support both frontline climate resilience roles and systemic transformation through your “Fundamental” and “Cure” module logic.

SDG 13 Credentialing Framework: Modules, Levels, and Credits

Category	Module Title	Level	Credits	Purpose
Fundamental	Climate Adaptation Technician	Level 3–5	25–40	Equip learners to implement nature-based and infrastructure-based adaptation strategies in vulnerable zones
Fundamental	Carbon Sequestration Field Worker	Level 2–4	20–35	Train workers in afforestation, soil carbon enhancement, and biochar deployment
Fundamental	Early Warning System Operator	Level 3–5	25–40	Build capacity to operate, maintain, and communicate alerts from meteorological and hazard-monitoring systems
Cure	Disaster Risk Reduction Mobilizer	Level 4–6	30–50	Coordinate community preparedness, evacuation planning, and risk mapping for climate hazards
Cure	Climate Education Facilitator	Level 4–6	30–45	Deliver inclusive, locally contextualized climate literacy programs across schools, youth hubs, and informal networks

Category	Module Title	Level	Credits	Purpose
Cure	Loss & Damage Data Collector	Level 4–6	30–50	Document climate-related impacts, support reparations advocacy, and feed into national and global reporting systems

Design Highlights

- **Fundamental Modules:** Focused on technical competencies for adaptation, mitigation, and early warning systems.
- **Cure Modules:** Address systemic enablers—education, data justice, and community resilience.
- **Credits:** Modular and stackable, aligned with ACQF and QCTO referencing for cross-border mobility.
- **Assessment:** RPL-integrated, with badge anatomy, dashboard legends, and portfolio-based evidence..

. **SDG 14:** Life Below Water credentialing framework, structured to support both frontline ocean stewardship and systemic blue economy transformation through your “Fundamental” and “Cure” module logic.

SDG 14 Credentialing Framework: Modules, Levels, and Credits

Category	Module Title	Level	Credits	Purpose
Fundamental	Marine Pollution Response Worker	Level 2–4	20–35	Train workers to detect, contain, and clean up oil spills, chemical runoff, and marine debris
Fundamental	Seaweed Farming Technician	Level 3–5	25–40	Equip learners to cultivate seaweed for food, biofuel, and carbon sequestration in coastal zones
Fundamental	Coral Restoration Diver	Level 3–5	25–40	Build capacity in reef monitoring, coral propagation, and underwater restoration techniques
Cure	Blue Carbon Ecosystem Mapper	Level 4–6	30–50	Map mangroves, seagrasses, and salt marshes for carbon accounting and conservation planning
Cure	Coastal Community Livelihood Advisor	Level 4–6	30–45	Support fisherfolk and coastal dwellers in transitioning to sustainable, climate-resilient

Category	Module Title	Level	Credits	Purpose
				livelihoods
Cure	Ocean Plastics	Level	25–40	Coordinate collection, sorting, and upcycling of marine plastics through community and tech-enabled systems
	Recovery Agent	3–5		

Design Highlights

- **Fundamental Modules:** Focused on hands-on ocean restoration, aquaculture, and pollution response.
- **Cure Modules:** Address systemic enablers—ecosystem mapping, livelihood transition, and circular recovery.
- **Credits:** Modular and stackable, aligned with ACQF and QCTO referencing for cross-border mobility.
- **Assessment:** RPL-integrated, with badge anatomy, dashboard legends, and portfolio-based evidence.

SDG 15 Credentialing Framework: Modules, Levels, and Credits

SDG 15 credentialing frameworks use modular learning units, NQF-referenced levels, and credit systems to formalize competencies in biodiversity conservation, sustainable land use, and ecosystem restoration. These structures support stackability, recognition of prior learning, and cross-sector mobility.

SDG 15 Focus Areas

Modules typically align with key biodiversity and land stewardship domains:

- **Forest and wetland restoration**
- **Invasive species management**
- **Agroecology and sustainable land use**
- **Community-based conservation**
- **Biodiversity monitoring and data collection**

These modules can be tailored for roles like *ecosystem restoration technicians*, *biodiversity field officers*, or *community conservation facilitators*.

Modular Structure

- **Modules** are discrete learning units focused on specific competencies.
- They are designed to be *stackable*, allowing learners to build toward part-qualifications, full qualifications, or occupational badges.
- Example module titles:
 - “Habitat Mapping and Species Inventory”
 - “Agroforestry Techniques for Smallholders”
 - “Community Engagement in Conservation”

NQF-Referenced Level

Modules are pegged to **National Qualifications Framework (NQF)** levels:

NQF Level	Role Examples	Complexity
Level 1 – 4	Biodiversity awareness facilitators	Basic knowledge and skills
Level 5 – 6	Conservation field technicians	Applied technical skills
Level 7 – 8	Ecosystem planners, biodiversity analysts	Strategic and analytical expertise

This referencing ensures *comparability across countries and sectors*, especially when aligned with ACQF and QCTO frameworks [SAQA SADC](#).

Credit System

- **Credits** reflect the notional hours required to master a module:
 - *1 credit = 10 notional hours* (includes study, assignments, and assessments)
 - A typical module carries **12 credits = 120 hours**
- Full qualifications may require:
 - **120 credits** for a Higher Certificate
 - **360 credits** for a Bachelor’s degree [SAQA](#)

This structure supports **Credit Accumulation and Transfer (CAT)** and **Recognition of Prior Learning (RPL)**, enabling informal workers and youth to access formal pathways.

Micro-Credentials and Stackability

- SDG 15 frameworks increasingly use **micro-credentials** to validate short, targeted learning aligned with biodiversity roles.
- These are often delivered via **badge suites**, **dashboard legends**, and **progression maps** to visualize learner journeys and occupational mobility [North-West University \(NWU\)](#).

JSources: [SAQA](#) [SADC](#) [North-West University \(NWU\)](#)

\ SDG 16 Credentialing Framework: Modules, Levels, and Credits

An SDG 16-aligned credentialing framework uses modular learning units, NQF-referenced levels, and credit systems to formalize competencies in peacebuilding, justice, and inclusive governance. These structures support stackability, recognition of prior learning (RPL), and cross-sector mobility for roles in civic engagement, legal empowerment, and institutional reform.

□ SDG 16 Credentialing: Core Structure

□ Modular Learning Units

Modules are designed around key SDG 16 themes:

- *Conflict resolution and mediation*
- *Human rights and legal literacy*
- *Anti-corruption and transparency*
- *Community policing and restorative justice*
- *Civic participation and democratic governance*

Each module is:

- **Stackable:** Can be combined into part-qualifications or full qualifications
- **Contextualized:** Adaptable to local governance systems and justice needs
- **RPL-friendly:** Recognizes informal learning and lived experience in civic roles

□ NQF-Referenced Levels

Modules are pegged to National Qualifications Framework (NQF) levels to reflect complexity:

NQF Level	Role Examples	Competency Focus
Level 1–3	Civic facilitators, youth peace ambassadors	Basic awareness, facilitation skills

NQF Level	Role Examples	Competency Focus
Level 4–5	Paralegals, community mediators	Applied legal and mediation skills
Level 6–7	Governance analysts, policy advocates	Strategic planning, legal interpretation
Level 8+	Institutional reform specialists, justice system designers	Advanced policy and systems leadership

This referencing ensures **comparability across countries** and supports **ACQF and QCTO alignment**.

▮ Credit System

- **1 credit = 10 notional hours** of learning (includes study, practice, and assessment)
- Typical module: **12 credits** = 120 hours
- Full qualifications:
 - *Higher Certificate*: 120 credits
 - *Diploma*: 240 credits
 - *Bachelor's Degree*: 360 credits

Credits support:

- **Credit Accumulation and Transfer (CAT)**
- **Recognition of Prior Learning (RPL)**
- **Micro-credentialing and badge stacking**

Sources:

- [SAQA Qualification Guidelines](#) [SAQA](#)
- [UNISA NQF and Credit System Overview](#) [unisa.ac.za](#)
- [SADC Qualifications Recognition Manual](#) [SADC](#)

▮ **SDG 17 Credentialing: Core Structure Partnership** Jobs in sustainability that apply circular economy principles are growing rapidly across sectors like waste management, renewable energy, green design, and sustainable manufacturing. These roles focus on minimizing waste, extending product lifecycles, and regenerating natural systems

▮ Modular Learning Units

Modules are designed around key SDG 17 themes:

- *Multi-stakeholder partnership building*
- *Global policy alignment and coordination*
- *Monitoring and evaluation of SDG impact*
- *Systems thinking and intersectoral collaboration*
- *Resource mobilization and financing for development*

Each module is:

- **Stackable:** Can be combined into part-qualifications or full qualifications
- **Contextualized:** Adaptable to local, regional, and global partnership contexts
- **RPL-friendly:** Recognizes informal coalition-building, summit convening, and policy engagement

NQF-Referenced Levels

Modules are pegged to National Qualifications Framework (NQF) levels to reflect complexity:

NQF Level	Role Examples	Competency Focus
Level 1–3	SDG awareness facilitators, youth mobilizers	Basic partnership literacy
Level 4–5	Coalition coordinators, summit planners	Applied stakeholder engagement
Level 6–7	Systems integration officers, policy liaisons	Strategic coordination and monitoring
Level 8+	Global cooperation strategists, SDG integration advisors	Advanced leadership and systems design

▮ Credit System

- **1 credit = 10 notional hours** of learning (includes study, practice, and assessment)
- Typical module: **12 credits** = 120 hours
- Full qualifications:
 - *Higher Certificate:* 120 credits
 - *Diploma:* 240 credits
 - *Bachelor's Degree:* 360 credits

Credits support:

- **Credit Accumulation and Transfer (CAT)**
- **Recognition of Prior Learning (RPL)**

Jobs in sustainability that apply circular economy principles are growing rapidly across sectors like waste management, renewable energy, green design, and sustainable manufacturing. These roles focus on minimizing waste, extending product lifecycles, and regenerating natural systems.

Key Circular Economy-Aligned Job Roles

Here are some of the most impactful and emerging roles:

- **Sustainability Consultant:** Advises companies on reducing waste, improving energy efficiency, and embedding circular practices into operations [LinkedIn](#).
- **Product and Packaging Designer:** Designs products for reuse, repair, and recyclability, often using biodegradable or upcycled materials [LinkedIn](#).
- **Feedstock/Waste Agent (Biogas):** Converts organic waste into bio-methane, green CO₂, and fertilizer, supporting regenerative energy loops [PNet](#).
- **Reverse Logistics Coordinator:** Manages the return, refurbishment, and redistribution of products to keep materials in circulation.
- **Materials Innovation Specialist:** Develops sustainable, recyclable, or biodegradable materials to replace single-use inputs.
- **Urban Mining Technician:** Extracts valuable materials from e-waste and construction debris, reducing reliance on virgin resources.
- **Circular Supply Chain Analyst:** Designs supply chains that prioritize reuse, remanufacturing, and closed-loop systems.
- **Environmental Impact Assessor:** Evaluates the lifecycle impact of products and services, guiding companies toward circular alternatives.

Where to Find These Jobs

- **South Africa:** Roles are emerging in Cape Town, Pretoria, and Gauteng across sectors like recycling, green energy, and sustainable design [LinkedIn](#) [PNet](#).
- **Global Platforms:** Sites like LinkedIn and The Impact Investor list circular economy jobs worldwide, including remote and hybrid options [The Impact Investor](#).

Skills That Boost Employability

- **Life Cycle Assessment (LCA)**
- **Design for Disassembly**
- **Systems Thinking**
- **Green Procurement**
- **Data analytics for waste/resource flows**
- **Knowledge of ESG frameworks and reporting**

SUSTAINABLE DEVELOPMENT GOALS - 2030



PROFESSIONAL UP-SKILLING OF GREEN TALENT

Today, the Earth is facing a triple planetary crisis: climate disruption, nature and biodiversity loss pollution and waste.

The triple crisis is threatening the well-being and survival of millions of people around the world putting the sustainable development goals in jeopardy (**UN Environmental Day Speech 05/06/2022**)

A Green Occupation has any one or more of these Sustainable Developments Green Economy skills:

Managers	Occupations	Major Green Skills
2017-121901	Corporate General Manager Green Procurement Green Economy - Circular Principles	Green Products EMS systems
2017-121101	Finance Manager Green fuels - Circular Principles - End of Life fleet	Green Financing Circular Principles
2017-111207	Senior Government Manager Circular Principles Carbon Emissions - Green fuels	Green Skills End of Life fleet
2017-132403	Road Transport Manager Carbon Emissions Green Skills -Green funds	Green fuels End of Life fleet

2017-111202	General Manager Public Service Circular Principles - Coding all Materials Green Economy	Env Management Carbon Emissions
2017-333905	Supply Chain Practitioner Green Economy - Green Procurement Carbon Emissions	Circular Principles Green Skills
2017-133105	Information Technology Manager Coding all Materials Circular Principles -AI Green Skills -	Coding all Materials Green Procurement
2017 – xxxxxx Current Environmental Managers	Environmental Pollution & Waste Manager Coding all Materials - Circular Principles Green Procurement Green fuels -	End of Life fleet Green Economy Carbon Emissions
FEMALE GREEN TALENT DEVELOPMENT ZONE		