



Certificate in Applied Innovation & Management:

Financial Planning: 3DCP for Housing

Learn how to plan, finance, and deliver housing developments using 3D concrete printing.

This applied certificate equips professionals with the tools to evaluate real estate development opportunities and adapt them to emerging construction technologies.

Why this certificate matters

The global housing shortage requires faster, more scalable building methods.

3D concrete printing is transforming how housing projects are planned, financed, and delivered. Professionals who understand both **real estate development and construction technology** will lead the next generation of housing projects.

This certificate bridges those two worlds.

What you will learn

Real Estate Development

Understand the full development lifecycle.

Site selection, zoning, and market feasibility.

Financial Structuring

Build development budgets, evaluate costs, and model project returns.

3D Construction Technology

Compare traditional construction with 3D printing methods and assess implementation challenges.

Highlights



Flexible asynchronous learning



Designed for working professionals



Midterm and capstone with real scenarios



Technology focused housing innovation

Certificate Structure

Foundations of Development

Module 1. Introduction to Real Estate Development

Understand the development lifecycle from site acquisition to project completion. Explore zoning regulations, feasibility, and market dynamics.

Financial Planning

Module 2. Financial Planning in Real Estate

Learn how to structure development budgets including hard costs, soft costs, interest carry, and working capital.

Construction Technology

Module 3. 3D Printing in Construction

Explore the fundamentals of 3D concrete printing and its potential for sustainable housing delivery.

Comparative Analysis

Module 4. Technology vs Conventional Construction

Analyze opportunities and constraints of 3D construction printing compared with traditional building methods.

Project Finance for 3D Construction

Module 5. Project Finance for 3D Construction

Apply financial modeling concepts including gross construction square foot calculations and return analysis.

Assessment Model

The certificate combines continuous assessment and applied project work.

Assignments and project tasks	10%	Content review quizzes	20%	Minimum passing score across all modules	50%
Midterm project and quiz	35%	Capstone project and quiz	35%		

Certification

Learners who successfully complete the modules receive the

Certificate in Applied Innovation and Technology 3D Construction Printing for Housing

Certificate to be issued by Rhodes University.

Certificate fee: US\$ 5000

For enquiries, please contact::

a.petscha@ru.co.za

catherines@elearnafricalms.com



APPLY HERE

Rhodes University is recognised by the South African Qualifications Authority (SAQA) and the Department of Higher Education and Training (DHET) as a registered provider of higher education and has been delegated authority by the Higher Education Quality Committee (HEQC) to accredit its own short courses.

Programme
Partners:



Rhodes Business School
Leadership for Sustainability



Powered by eLearnAfricaLMS UK Ltd