



SOUTH AFRICAN COUNCIL FOR THE LANDSCAPE ARCHITECTURAL PROFESSION

169 Corobay Ave, Block A, 2nd Floor, Waterkloof Glen, Pretoria
[www:saclap.org.za](http://www.saclap.org.za)

registrar@saclap.org.za

EMPLOYMENT OPPORTUNITY CAPE PENINSULA UNIVERSITY OF TECHNOLOGY (CPUT) Part-time lecturer required: AutoCAD, SketchUP, Photoshop

CPUT are looking for a part-time lecturer to teach x2 Computer Drawing subjects:

- Construction Drawing 1B.
- Construction Drawing 2B.

The details and hours per week below.

The lecturer would need a Master's level degree to qualify.

Construction Drawing 1B

Subject code: CDG151S

NQF level: 5

SAQA credits: 9

Notional study hours (per week)

Contact time: 2

Independent study: 4

Short narrative / description of subject focus

Theme: Intro to SketchUp and Intro to AutoCAD

While the first Construction Drawing subject exposed students to landscape hand-drawing conventions, this second semester subject introduces students to the basics of 3D (SketchUp) and 2D (AutoCAD) digital drawing. The SketchUp component complements the three-dimensional exploration that takes place in the Integrated Design Studio while the AutoCAD component prepares students for basic AutoCAD draughting that relates to the scale of their residential design project. This course is taught via a flipped-classroom method where students practice drawing tools in their own time and complete tutorials under the guidance and supervision of a lecturer and tutors.

Topics to be covered

SketchUp: Modelling a single but complex object (e.g. play equipment, gazebo, pergola, abstract spatial model)

- Navigating SketchUp space (Units, Axes, Pan, Orbit, Zoom)
- Basic shapes (Lines, Rectangles, Circles, Arcs)
- Basic 3D tools (Push/Pull, Copy, Erase, Follow Me, Rotate, Scale, Offset)
- Dimensions, Tape Measure, Guidelines
- Groups and components
- Intersect and sections
- Styles, scenes and animation

AutoCAD: (Drawing a small residential landscape plan e.g. courtyard or rooftop landscape plan)

- Saving files and backups
- Navigating model space (Object snap, Polar tracking)
- Layout space (Layout, Page setup, Viewports, scale drawings, plot options)
- Scale viewports and layout & plot settings

- Basic drawing tools (Circle, Line, Polyline, Rectangle, Arc)
- Basic editing tools (Offset, Copy, Rotate, Trim, Extend, Fillet, Delete, Mirror)
- Layers, line weights (Line types, Match properties), hatching
- Dimensions (Creating and editing dimensions) and text (Annotations)

Construction Drawing 2B

Subject code: CDG261S

NQF level: 6

SAQA credits: 8

Notional study hours (per week)

Contact time: 2

Independent study: 3

Short narrative / description of subject focus

Theme: Digital representations of landscape

While this subject continues with advanced techniques in AutoCAD and SketchUp that relating to landscape sites, students will start to explore using a range of programmes to create layered and composite digital drawings.

Topics to be covered

Advanced AutoCAD

- Using files from other professionals
- Measuring objects
- Calculating areas (Quickcalc)
- Coordinates
- Xrefs
- Working from aerial photographs

SketchUp

- Sandbox tools
- Slopes and Grades
- Working in layers
- Backdrops
- Shadows

Photoshop

- Creating base plans with aerial photography
- Importing PDF line work from AutoCAD
- Base plan and section rendering

Adobe Illustrator

For more information/ to apply, contact Johan van Rooyen - [<mailto:VANROOYENJO@cput.ac.za>]