

# GeometryNodeCurveToPoints(GeometryNode)

base classes — `bpy_struct`, `Node`, `NodeInternal`, `GeometryNode`

**class** `bpy.types.GeometryNodeCurveToPoints(GeometryNode)`

Generate a point cloud by sampling positions along curves

## mode

How to generate points from the input curve

- `EVALUATED` Evaluated – Create points from the curve’s evaluated points, based on the resolution attribute for NURBS and Bézier splines.
- `COUNT` Count – Sample each spline by evenly distributing the specified number of points.
- `LENGTH` Length – Sample each spline by splitting it into segments with the specified length.

## TYPE:

enum in ['EVALUATED', 'COUNT', 'LENGTH'], default 'COUNT'

**classmethod** `is_registered_node_type()`

True if a registered node type

## RETURNS:

Result

## RETURN TYPE:

boolean

**classmethod** `input_template(index)`

Input socket template

## PARAMETERS:

**index** (*int in [0, inf]*) – Index

## RETURNS:

result

## RETURN TYPE:

`NodeInternalSocketTemplate`

**classmethod** `output_template(index)`

Output socket template

## PARAMETERS:

**index** (*int in [0, inf]*) – Index

## RETURNS:

result

## RETURN TYPE:

`NodeInternalSocketTemplate`

**classmethod** `bl_rna_get_subclass(id, default=None)`

## PARAMETERS:

**id** (*str*) – The RNA type identifier.

## RETURNS:

The RNA type or default when not found.

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**RETURN TYPE:**`bpy.types.Struct` subclass**classmethod** `bl_rna_get_subclass_py(id, default=None)`**PARAMETERS:****id** (*str*) – The RNA type identifier.**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `Node.type`
- `Node.location`
- `Node.location_absolute`
- `Node.width`
- `Node.height`
- `Node.dimensions`
- `Node.name`
- `Node.label`
- `Node.inputs`
- `Node.outputs`
- `Node.internal_links`
- `Node.parent`
- `Node.warning_propagation`
- `Node.use_custom_color`
- `Node.color`
- `Node.color_tag`
- `Node.select`
- `Node.show_options`
- `Node.show_preview`
- `Node.hide`
- `Node.mute`
- `Node.show_texture`
- `Node.bl_idname`
- `Node.bl_label`
- `Node.bl_description`
- `Node.bl_icon`
- `Node.bl_static_type`
- `Node.bl_width_default`
- `Node.bl_width_min`
- `Node.bl_width_max`
- `Node.bl_height_default`
- `Node.bl_height_min`
- `Node.bl_height_max`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `Node.poll_instance`
- `Node.update`
- `Node.insert_link`
- `Node.init`
- `Node.copy`
- `Node.free`
- `Node.draw_buttons`
- `Node.draw_buttons_ext`
- `Node.draw_label`
- `Node.debug_zone_body_lazy_function_graph`
- `Node.debug_zone_lazy_function_graph`
- `Node.poll`
- `Node.bl_rna_get_subclass`
- `Node.bl_rna_get_subclass_py`

- bpy\_struct.keys
- bpy\_struct.path\_from\_id
- bpy\_struct.path\_resolve
- bpy\_struct.pop
- bpy\_struct.property\_overridable\_library\_set
- bpy\_struct.property\_unset
- bpy\_struct.type\_recast
- bpy\_struct.values
- Node.socket\_value\_update
- Node.is\_registered\_node\_type
- Node.poll
- NodeInternal.poll
- NodeInternal.poll\_instance
- NodeInternal.update
- NodeInternal.draw\_buttons
- NodeInternal.draw\_buttons\_ext
- NodeInternal.bl\_rna\_get\_subclass
- NodeInternal.bl\_rna\_get\_subclass\_py
- GeometryNode.poll
- GeometryNode.bl\_rna\_get\_subclass
- GeometryNode.bl\_rna\_get\_subclass\_py