

Sprawozdanie z wykonania Zadania 2

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Zmodyfikowany fragment kodu

```
% oczekujemy teraz 3 kolumn (x,y,z)
if (n ~= nr || m ~= 3)
    disp("Poorly constructed points array - expected N x 3");
    return
end

x_begin = knot_vector(1);
x_end = knot_vector(size(knot_vector, 2));
x = mesh(x_begin, x_end);

res_x = zeros(1, numel(x));
res_y = zeros(1, numel(x));
res_z = zeros(1, numel(x)); % nowa składowa Z

for ind = 1:nr
    spline = compute_spline(knot_vector, p, ind, x);
    fprintf('\n');
    res_x = res_x + (spline .* points(ind, 1));
    res_y = res_y + (spline .* points(ind, 2));
    res_z = res_z + (spline .* points(ind, 3)); % Z
end
```

Wywołanie:

G:

bspline_curve3D(100, [0 0 0 1 2 3 4 5 5 5], [

1 1.5 0;

1.5 1.5 0;

1.5 1.5 0;

1.5 0 0;

0 0 0;

0 3 0;

1.5 2.5 0

])

K:

```
bspline_curve3D(100, [0 0 0 1 1 2 2 3 3 4 5 5 5], [
```

```
0 3 0;
```

```
0 0 0;
```

```
0 0 0;
```

```
0 1.5 0;
```

```
0 1.5 0;
```

```
1.5 3 0;
```

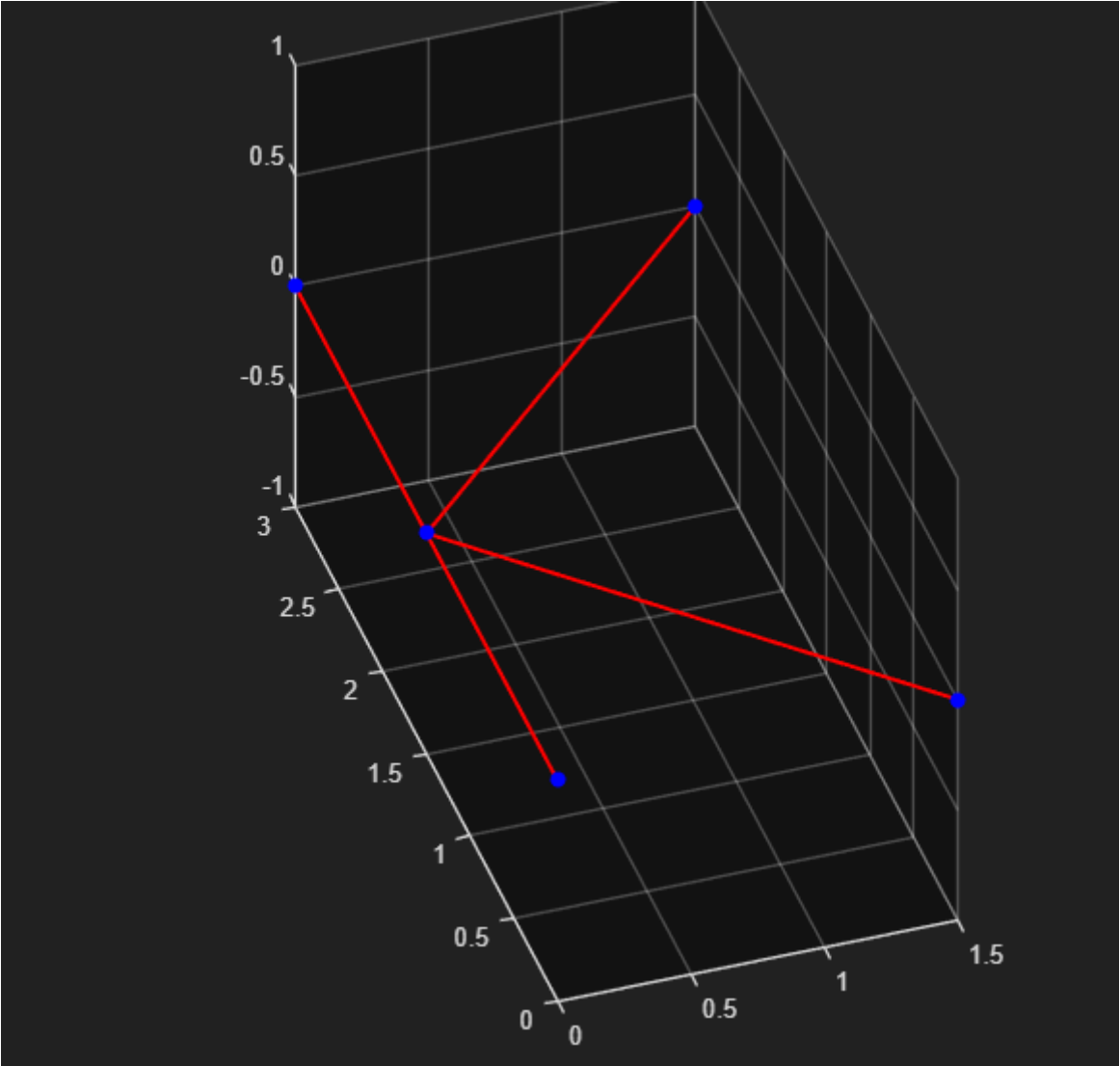
```
1.5 3 0;
```

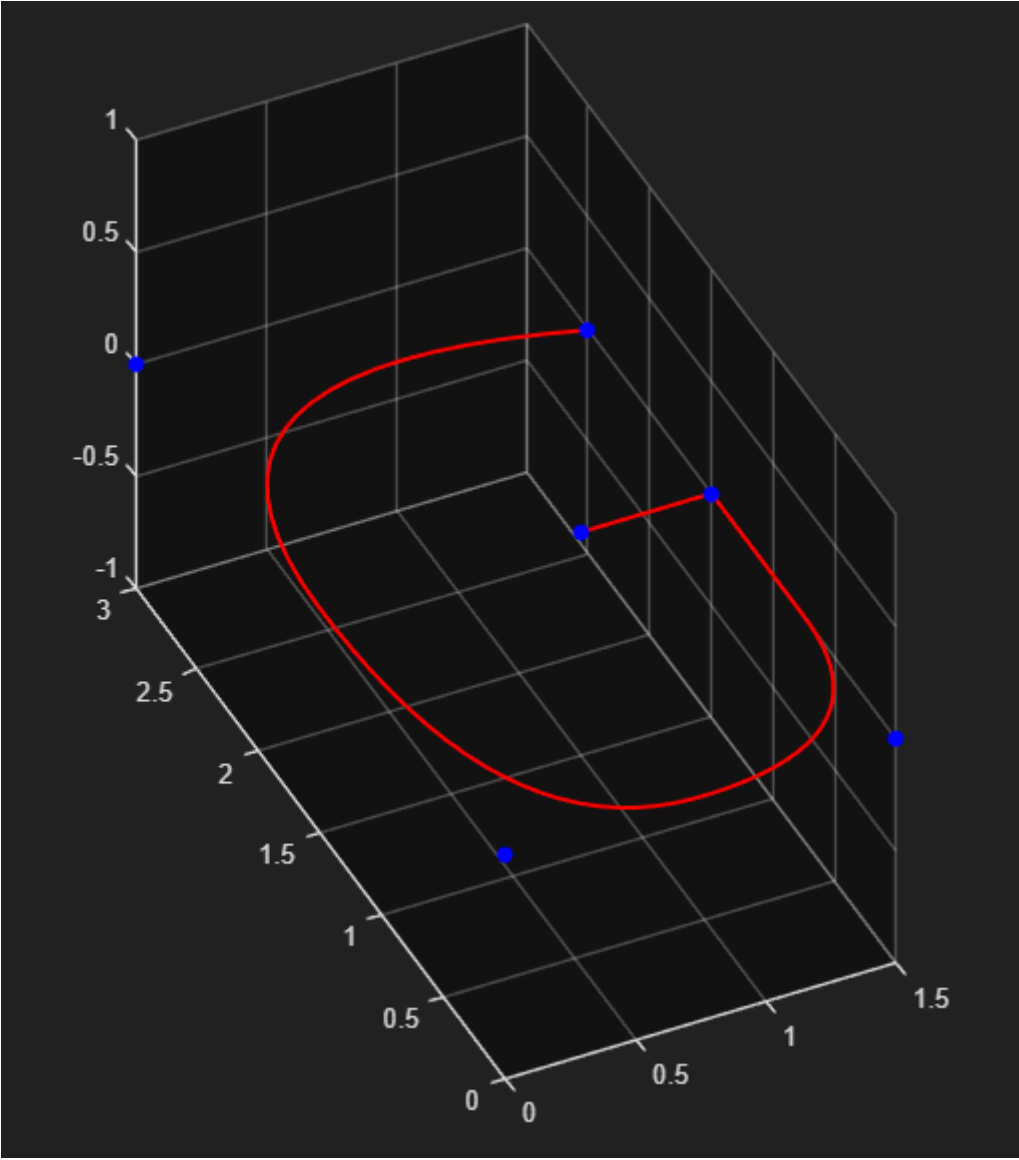
```
0 1.5 0;
```

```
0 1.5 0;
```

```
1.5 0 0
```

```
])
```





Wynik działania kodu z Pythonie:

