

```

data = readmatrix('samples.csv');

t = data(:,1);

x = data(:,2);

Ts = t(2) - t(1);

fs = 1/Ts;

N = length(x);

X = fft(x);

X_mag = abs(X)/N;

f = (0:N-1)*(fs/N);

figure

plot(f, X_mag)

xlabel('Frequency (Hz)')

ylabel('Magnitude')

title('FFT Magnitude Spectrum (Full Frequency Axis)')

grid on

```

