

## **EE257/GP 258 Extra Handout FFT – C++/C**

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You can use the FFT routine “four1.c” under software tab for the homework.

You can also use the Eigen for this homework assignment. Here is a simple example:

```
#include <unsupported/Eigen/FFT>
#include <iostream>
using namespace Eigen;

int main()
{
    VectorXcd in(10);
    VectorXcd out(10);
    for( int ind=0; ind<10; ++ind )
    {
        // ind - j*ind
        in[ind] = std::complex<double>(ind,-ind);
    }

    FFT<double> fft;
    fft.fwd(out,in);

    std::cout << in << std::endl;
    std::cout << out << std::endl;
}
```