

課程名稱：生醫訊號處理  
英文課名：Biomedical Signal Processing  
學分數：3  
課程編號：BMES5465  
開課時間：W2W3W4  
授課對象：碩士班一年級以上、大學部三、四年級  
授課教師：葉秩光

課程目的：

Students learn principles and applications of biomedical digital signal processing.

課程大綱：

1. Introduction to Biomedical Signals
2. Signals and Systems
3. Fourier Transform
4. Sampling
5. Laplace Transform
6. Z-transform
7. Fast Fourier Transform Processing
8. Filter Design
9. Models for Real-Time Processing

授課方式：

Lecture

成績：

Quizzes: 20%

Midterm: 30%

Final: 30%

Homeworks: 20%

參考書目：

1. System Theory and Practical Applications of Biomedical Signals, by G. D. Baura, John Wiley & Sons, 2002
2. Signals and System, by A. V. Oppenheim and A. S. Willsky, 2nd ed., Prentice-Hall, 1997
3. Medical Instrumentation: Application and Design, 3rd edition, John G. Webster, John Wiley & Sons, New York, 1998.