# Ming Chuan University School of Health Technology
## "Biomedical Signal Processing Focused Course Program" Curriculum Framework
### (6701_109)

Implementing Unit: Biomedical Engineering Department

Passed at the Department Curriculum Committee Meeting and the Department Affairs Committee Meeting on November 17, 2020

| Course Type | Course Number | Course | Credits | Note |
|---|---|---|---|---|
| Required | BME：67245(109) 67257(108,107,106) EE：37101 | Programming Design I | 2 | School of Health Technology BME, School of Information Technology EE |
| Required | BME：67243 EE：37222 | Electronics I | 3 | SHT BME, SOIT EE |
| Required | BME：67244 EE：37223 | Electronics II | 3 | SHT BME, SOIT EE |
| Required | BME：67223 EE：37208 | Signals and Systems | 3 | SHT BME, SOIT EE |
| Elective | 67246(109) 67258(108,107,106) | Programming Design II | 2 | SHT BME |
| Elective | 67325(109,108) 67362(107,106) | Biostatistics | 3 | SHT BME |
| Elective | 67361 | Medical Electronics | 3 | SHT BME |
| Elective | 67356 | Digital System Design | 3 | SHT BME |
| Elective | 67357 | Biomedical Signal Processing | 3 | SHT BME |
| Elective | 67461 | Biosensor | 3 | SHT BME |
| Elective | 67452 | Medical Measurement and Instrumentation | 3 | SHT BME |
| Elective | 37233 | Probability and Statistics | 3 | SOIT EE |
| Elective | 37224 | Microprocessor Fundamentals and Laboratory | 3 | SOIT EE |
| Elective | EE062 | Introduction to Digital Signal Processing | 3 | SOIT EE |

| Course Type | Course Number | Course | Credits | Note |
|---|---|---|---|---|
| Elective | 37353 | Electronic Circuit Design | 3 | SOIT EE |
| Elective | 37355 | FPGA/CPLD Design | 3 | SOIT EE |
| Elective | 37377 | Introduction to Digital Image Processing | 3 | SOIT EE |
| Elective | 37462 | Introduction to Computer Vision | 3 | SOIT EE |
| Elective | 37456 | Embedded Systems | 3 | SOIT EE |

Requirements：

1. Students are required to complete 20 credits during the years allotted, including 11 credits from required subjects and 9 credits from elective subjects. At least 6 credits must be courses not in students' original department or department of minor.

2. Students who applied for this focused course program before the 2020-21 academic year may also use this curriculum as a standard.