Learning Objectives （Knowledge, Skills and Competences）

1) Basic scientific literacy and engineering capabilities

- Through the study of general education courses, possess good humanistic care, social morality, and other humanistic and social science literacy.
- Master the basic knowledge of mathematics, natural sciences, and information technology, and have the ability to apply this knowledge and technology to understand, express, and solve engineering problems.
- Ability to understand and participate in job and technical requirements for application systems based on biomedical engineering.
- Understand the development trends and application prospects of modern technology.

2) Professional competencies and capabilities

- Master the basic and professional knowledge of engineering, machinery, mechanics, circuits, electronics, signals and systems, and have the ability to apply engineering and professional knowledge to analyze various engineering phenomena in the field of biomedical engineering.
- Having professional practical skills and abilities to apply engineering knowledge, methods, tools, and techniques to solve practical problems in engineering applications.
- Ability to pursue further education, engage in scientific research, and pursue graduate studies.

3) Engineering thinking and practice ability

- Master the professional knowledge of solving complex engineering problems in the field of biomedical engineering, and possess the thinking ability to apply theoretical knowledge to solve complex problems in biomedical engineering.
- Capable of designing and customizing biomedical engineering solutions, showcasing innovation during the design process while considering social, health, safety, ethical, legal, cultural, economic, and environmental factors.
- Capable of installing, debugging, operating, managing, and maintaining medical

equipment according to standards, and able to conduct reasonable analysis and evaluation of actual engineering problems, and provide solutions.

4) Capability in international communication

- Ability to access English major materials.
- The ability to communicate with foreign peers and further study abroad.
- Understand English and foreign cultural backgrounds, and have the ability to work and collaborate in multinational corporations.

5) Team work and management capabilities

- Having a healthy mentality and a complete personality.
- Have good communication skills and teamwork spirit.
- Have good legal awareness and social responsibility.

6) The consciousness and ability of lifelong learning

- Ability to continuously learn new professional knowledge.
- Ability to learn practical engineering skills.
- Have the awareness and ability to engage in lifelong learning of biomedical engineering theory and technology.