生物醫學工程學系　博士班

113 學年度

最低修業年限	四個學期
應修學分數	18
逕博應修學分數	33
應修(應選)課程及符合畢業資格之修課相關規定	(一) 醫學工程專題討論： 1. 在學期間，至少需修滿四學期，方得畢業，但不計入畢業學分。 2. 二年級至五年級學生在學期間，每年需就論文研究進度，於「醫學工程專題討論」課程中以英文進行口頭報告。 (二) 生命科學相關課程： 1. 大學或碩士未曾修過「生理學」(3 學分以上)，生理學為必選課程。 2. 若大學或碩士曾修過「生理學」(3 學分以上)，須於新生報到時向系上提出申請，經核可得免修。 (三) 數學相關課程： 1. 大學或碩士未曾修過「工程數學」(3 學分以上)，或高於微積分之進階數學課程(3 學分以上)，工程數學為必選課程。 2. 若大學或碩士曾修過「工程數學」(3 學分以上)，或高於微積分之進階數學課程(3 學分以上)，須於新生報到時向系上提出申請，經核可得免修。 (四)須修讀主要指導教授所屬研究領域組別課程至少 9 學分，其他組別的課程至少 3 學分。 (五) 除醫、牙學系畢業學生外，所有學生必選「臨床工程實務」課程。 (六) 未修過本系四學分「醫學工程概論」者，必須選修該課程，不及格者重修。 (七) 選修課程以本系為原則，如選外校、外所課程應於修課前向系上提出申請且須經學術暨課程委員會認定使得以列入畢業學分。 (八)申請博士資格考核必須完成以下條件： 1.完成上述第(二)、(三)、(六)項之規定。 2.完成上述第(四)項規定之其他組別課程至少 3 學分。 3.需依照主要指導教授所屬研究領域修畢指定科目： 生醫電子組-醫學工程概論 生醫機械組-生物力學、高等材料力學 生醫材料組-生醫材料。 --- 外籍博士生的修課規定： 1. 外籍博士生至少修畢 18 學分才能取得博士學位，同學選課之前必須與本系的論文指導教授討論要修讀哪些課程。 2. 外籍博士生至少修讀 12 學分的本系 EMI 課程，其餘 6 學分可修讀本校任何單位開授的研究所課程。 3. 外籍博士生申請資格考核之前必須修畢論文指導教授所屬研究領域的指定課程，課程名稱如下： 生醫電子組 --- 量測及儀表 生醫機械組 --- 高等材料力學 或 生物力學 生醫材料組 --- 電漿技術在生物醫學上之應用

Department of Biomedical Engineering Ph. D. Program

Academic Year 2024-2025

Mini. Term of Study	four semesters
Minimum Credits	18
Minimum Credits for Direct-Entrance Ph.D.	33
Curriculum and Regulations	I. Students must take seminar course at least four semesters, but the credits of seminar course cannot be counted into credits requirement for graduation. During grade two to grade five, students have to present their research progress on seminar course one time each year. II. Students who have gotten credits of "Physiology" (more than 3 credits) during college can apply for waiving life science course on freshman registration day, otherwise they have to take "Physiology" course. III. Students who have gotten credits of "Engineering Mathematics" or other similar mathematical course (more than 3 credits) during college can apply for waiving mathematical course on freshman registration day, otherwise they have to take "Engineering Mathematics" course. IV. Students must get at least 9 credits in the major field designated by their advising professor and at least 3 credits in other fields. V. All students must take "Workshop in Clinical Engineering" course except students graduated from school of medicine or school of dentistry. VI. All students must get the credits of "Introduction to Biomedical Engineering" course. VII. Students should submit course application before choosing courses in other departments. Course and Academic Committee will recognize whether the credits of courses in other departments can be counted into credits requirement for graduation or not. VIII. Students who want to apply for qualifying examination should meet the following requirements. (1) Complete the second, third and sixth course regulations mentioned above. (2) Complete "at least 3 credits in other fields" defined in the fourth course regulations mentioned above. (3) Get credits from the following courses according to the major field of their dissertation advisor. Bioelectronics – Introduction to Biomedical Engineering Biomechanics – Biomechanics, and Advanced Material Mechanics Biomaterials – Biomedical Materials

	--- For international students: I. Doctoral students must enroll for at least 18 graduate credits as part of the doctor's degree requirements, with the course selection plans approved by their dissertation advisor from the Department of Biomedical Engineering. II. A minimum of 12 credits must be obtained by taking the English as a Medium of Instruction (EMI) Courses offered by the Department of Biomedical Engineering. The rest of the credits may be obtained by taking graduate-level courses offered by any academic unit of NYCU. III. Students who want to apply for qualifying examination should get credits from the following course according to the major field of their dissertation advisor. Bioelectronics – Measurements and Instrumentation Biomechanics – “Advanced Material Mechanics” or “Biomechanics” Biomaterials – Plasma technologies for biomedical applications