

長庚大學 機械工程研究所博士班 必選修科目表 (108 學年度入學學生適用)
Course List for Doctor of Philosophy (Ph.D.) Degree Program in Department of Mechanical Engineering,
Chang Gung University (for 2019 Calendar Year)

| 領域／組 別 Area | 必選修 Compulsory or Elective | 科目名稱 Course Title | 學分 Credits | 開課 年級 Year | 上學期 1st semester | 下學期 2nd semester |
|----------------|----------------------------------|---|---------------|------------------|------------------------|------------------------|
| | 必 C | 學報討論# Seminar | 2 | 1st | 1 | 1 |
| | 必 C | 學報討論# Seminar | 2 | 2nd | 1 | 1 |
| | 必 C | 科技英文寫作(1) English Technical Writing(I) | 1 | 1st | 1 | |
| | 必 C | 科技英文寫作(2) English Technical Writing (II) | 1 | 1st | | 1 |
| | 選 E | 彈性力學 Theory of Elasticity | 3 | 1st | 3 | |
| | 選 E | 高等材料力學 Advanced Strength of Material | 3 | 1st | 3 | |
| | 選 E | 機械冶金* Mechanical Metallurgy | 3 | 1st | 3 | |
| | 選 E | 醫學影像處理 Medical Image Processing | 3 | 1st | 3 | |
| | 選 E | 電極加工特論 Special Issue of Electrode Machining | 3 | 1st | 3 | |
| | 選 E | 材料破壞分析與預防* Analysis and Prevention of Materials Failures | 3 | 1st | 3 | |
| | 選 E | 醫療微機電 Medical MEMS | 3 | 1st | 3 | |
| | 選 E | 生物感測器技術 Biosensor Technology | 3 | 1st | 3 | |
| | 選 E | 生物力學 Biomechanics | 3 | 1st | | 3 |
| | 選 E | 固體力學特論 Introduction to Solid Mechanics | 3 | 1st | | 3 |
| | 選 E | 電子光電構裝特論 Special Topics in Electronic/Optoelectronic Packaging | 3 | 1st | | 3 |
| | 選 E | 類神經網路 Neural Network | 3 | 1st | | 3 |
| | 選 E | 最佳化設計與原理 Optimum Design and Principle | 3 | 1st | | 3 |
| | 選 E | 高分子流變學 Polymer Rheology | 3 | 1st | | 3 |
| | 選 E | 電子顯微鏡分析* Electron Microscopy Analysis | 3 | 1st | | 3 |
| | 選 E | 生醫材料工程 Biomaterials Engineering | 3 | 1st | | 3 |
| | 選 E | 電漿製程與監測 Plasma Enhanced Processes and Monitoring | 3 | 1st | | 3 |
| | 選 E | 醫療機械設計 Design of Medical Device | 3 | 1st | | 3 |
| | 選 E | 生醫訊號分析 Biomedical Signal Analysis | 3 | 1st | | 3 |
| | 選 E | 電動力學 Electrodynamics | 3 | 1st | | 3 |

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| <p>備註</p> <p>Remarks</p> | <p>1.畢業學分：30 學分(含論文 6 學分)</p> <p>2.必修 6 學分(不含論文 6 學分)</p> <p>3.選修 18 學分，其中至少 9 學分以上為本所博士班課程（碩士班已選修本所博士班課程者，可至外所選修，補足學分要求），其餘 9 學分可在本所或本校其他所選課。</p> <p>4.經由外籍生管道入學之碩博士外籍生，修習院內外系所英語授課專業領域課程承認為畢業學分數，以畢業學分(不含【論文】及【學報討論】)之 50%為上限，所修習之課程需經指導教授同意並經學術委員會審查通過方得承認為畢業學分。</p> <p>5.其他：A.「學報討論」一、二年級為必修，合計四學分。畢業前至少須修習四個學期並通過。 B.英文能力要求：依「長庚大學工學院博士班研究生英能力檢測實施方案」規定 C.「*」表示隔年開授。 D.「#」表示英語授課。</p> <p>1. Graduation credits: 30</p> <p>2. Compulsory credits: 4 (Four Seminar courses for the first and the second year.)</p> <p>3. Graduation dissertation (6 credits)</p> <p>4. Elective courses from ME (9 credits)</p> <p>5. Elective courses from ME or other departments (9 credits)</p> <p>6. Others: A. “*”: offered bi-annually. B. “#”: taught in English C. English requirement: English Proficiency Assessment for Foreign Students.</p> <p>Remarks: For international students, English taught courses (excl. Seminar and graduation thesis) in the University can be accepted with conditions of a limitation of 9 credits and approval from advisor.</p> |
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