

**(115 學年) 材料科學與工程系研究所課程簡介**  
**(115 academic years) Department of Materials Science and Engineering Graduate Course Introduction**

| 課碼<br>Course Code                                                                    | 課程名稱<br>Course Title                                                                                             | 學分數<br>Credits | 必/選修(學期)<br>Required / Elective (Semester)                         | 課程大綱<br>Course Outline | 開課班別<br>Class                              |
|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------|------------------------|--------------------------------------------|
| TX5003301                                                                            | 工程專題討論<br>Special Seminar in Engineering                                                                         | 0              | 必(上) Required ( first semester )/<br>必(下) Required (next semester) |                        | 碩一、博一<br>Graduate Student                  |
|                                                                                      | 英文<br>English                                                                                                    | 4              | 畢業門檻<br>Graduation threshold                                       |                        | 參見修業相關規定<br>See the University Regulations |
| TX5017                                                                               | 高等高分子物理【核心 5 選 1】<br>Advanced Polymer Physics 【Choose 1 from 5 Cores】                                            | 3              | 選(上)<br>Elective ( first semester )                                |                        | 研究所<br>Graduate Student                    |
| <b>TX5023</b>                                                                        | 高等高分子化學【核心 5 選 1】<br><b>Advanced Polymer Chemistry</b><br>【Choose 1 from 5 Cores】                                | 3              | 選(下)<br>Elective ( next semester )                                 |                        | 研究所<br>Graduate Student                    |
| TX6604                                                                               | 高等材料表面分析【核心 5 選 1】<br>Advanced Surface Characterizations for Materials 【Choose 1 from 5 Cores】                   | 3              | 選(下)<br>Elective ( next semester )                                 |                        | 研究所<br>Graduate Student                    |
| TX5105                                                                               | 高等材料熱力學【核心 5 選 1】<br>Advanced Thermodynamics of Materials 【Choose 1 from 5 Cores】                                | 3              | 選(上)<br>Elective ( first semester )                                |                        | 研究所<br>Graduate Student                    |
| TX5021                                                                               | 半導體製程材料與技術【核心 5 選 1】<br>Materials Technology for Advanced Semiconductor Manufacturing<br>【Choose 1 from 5 Cores】 | 3              | 選(下)<br>Elective ( first semester )                                |                        | 研究所<br>Graduate Student                    |
| <u>選修課程，請查閱「課程查詢系統」</u><br><u>Elective courses, please refer to "Course Catalog"</u> |                                                                                                                  |                |                                                                    |                        |                                            |

依據 105.6.7 第 182 次教務會議通過，研究生必修 0 學分課程「學術研究倫理」，自 105 學年度入學研究生適用。請務必注意修習！

According to 182th session of courses(2016.6.7), graduate students (Master & Doctor) were asked to attend "academic research ethics" course (0 credit). This only applies to students enroll in 2016 and future.

依據 109.3.31 第 199 次教務會議通過，自 109 學年起，本系選讀博士學位，畢業應修學分數至少滿三十學分。請務必注意修習！

According to 199th session of courses(2020.03.31), graduate students studying for Direct Admission to Ph.D. Programs were asked to at least acquire thirty credits in our apartment. This only applies to students enroll in 2020 and future.

依據 110.5.10 本系「109 學年度第 6 次課程委員會會議」決議，110 學年起，本系研究所畢業學分內，訂定專業(TX)必選學分數，[詳細如公告](#)。

According to the 110.5.10 resolution of the "Sixth Curriculum Committee Meeting of the 109 School Year" of the department, starting from the 110 school year, within the graduated credits of the department, the required credits for the major (TX) will be determined. [Details are as announced.](#)

註：畢業學分(條件)，請依「[本校學則](#)」與系所相關規定。

Note: For graduation credits (conditions), please refer to the "School Rules" and relevant regulations of the department.