

國立交通大學機械工程學系跨域學程實施要點

NCTU Department of Mechanical Engineering

Guidelines for Cross-disciplinary Program Implementation

105 年 3 月 16 日系教學與課程委員會會議訂定

105 年 3 月 16 日系務會議通過訂定

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Set up by departmental teaching & curricular committee meeting on Mar. 16th, 2016

Set-up passed by the departmental affairs council on Mar. 16th, 2016

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- 一、國立交通大學機械工程學系(以下簡稱本系)為鼓勵學生進行跨領域學習，建立跨域學習深度，協助學生拓展第二專長，提供學生可以在畢業學分不增加或僅少量增加情況下，修畢跨域學程，特訂定本要點。

Article One The guidelines are set up for Department of Mechanical Engineering of National Chiao Tung University (hereinafter referred to as Our Department) to provide the opportunity for students to pursue cross-disciplinary learning without increasing graduate credits (or only a few extra credits) and to encourage students to conduct cross-disciplinary study, contribute to the development of cross-disciplinary study, and assist students in expanding a second specialty.

二、本要點實施對象

- 1.凡本校 104 學年度(含)之後入學之學士班學生均適用本要點。
- 2.本校 104 學年度(含)之後入學之學士班學生欲修習跨域學程且選擇本系為其跨域專長者
 - (1)得於大一下學期或大二下學期向其所屬學系(以下簡稱原系)提出申請，通過原系以及本系的雙邊審查後，方可進入跨域學程。
 - (2)外系學生修讀跨域學程且選擇本系做為其跨域專長者，其課程包含：校必修(含共同必修 28 學分)，原系基礎必修課程，原系跨域模組課程，以及列示於『機械工程學系跨域模組課程必修科目表』(如下表)的模組課程，並於畢業證書原系名稱後加註『機械工程』為其跨域專長。

Article Two Target students for the guidelines

- 1.All undergraduates matriculated at Our University in and after academic year 2015.
- 2.Undergraduates matriculated at Our University in and after academic year 2015 who wish to study on the cross-disciplinary program and choose our department as his/her cross-disciplinary specialty.
 - (1) Students can submit applications to the department in which they are matriculated (hereinafter referred to as the original department) in the 2nd semester of the freshman or sophomore year; students can only enroll in the cross-disciplinary program after they pass the bilateral review of the original department and our department.
 - (2) For students from other departments who would like to choose our department to study his/her cross-disciplinary specialty, the program must include compulsory courses at the university (including 28 credits for common compulsory courses), core curriculum of the original department, cross-disciplinary program module curriculum of the original department, and module curriculum listed in the “Compulsory courses list: cross-disciplinary module curriculum for Department of Mechanics Engineering” (refer to the list below). “Mechanical Engineering” could be marked as a “cross-disciplinary specialty” on the diploma after the original department.

- 三、本系指定一名專任教師擔任跨域學程導師，與原系所或學院的跨域學程導師組成導師群，專責輔導跨域學程的學生。

Article Three To give guidance to the students at this program, our department assigns a full-time teacher as the mentor in the cross-disciplinary program and helps form mentor groups with mentors from the cross-disciplinary program of the original departments or colleges.

- 四、為鼓勵不同系所或學院合作提出跨域共授課程，兩位以上教師開授跨領域之創新整合式課程，得依本校教師授課鐘點核計原則第 9 條第 6 款規定，教師的授課鐘點數可按到場時數計，但以開課前該門課程實際簽呈為依據。

Article Four In order to encourage different departments or colleges to work together for the proposal of

cross-disciplinary curriculum, the number of teaching hours for the innovating integrated curriculum offered by more than two teachers could be calculated by the actual time of teaching according to Subparagraph 6, Article 9 of National Chiao Tung University Teaching Hours Accounting Principle; however, this will require the official approval of the curriculum before the course starts.

五、本要點如有未盡事宜，悉依本校學則及其他相關規定辦理。

Article Five If there is any unaccomplished matter of the guidelines, it shall be handled in accordance with the school constitution of our university as well as other relevant regulations.

六、本要點經系、院及校級課程委員會通過並提教務會議核備後實施，修訂時亦同。

Article Six The guidelines are approved by the department, college and school-level curriculum committee and submitted to Academic Affairs Meeting for approval reference before putting it into practice, and shall do the same upon any amendment thereto.

機械工程學系跨域模組課程 必修科目表

Compulsory Courses List Cross-disciplinary Module Curriculum for the Department of Mechanical Engineering

類別 Category	科目名稱 Course Name	學分 Credit	開課系所 Department
機械跨域模組 Mechanical cross-disciplinary module	應用力學(一) Applied Mechanics (I)	3	機械系(或經本所審核通過之科系) Department of Mechanical Engineering (or the department passed the review of our department)
	應用力學(二) Applied Mechanics (II)	3	機械系(或經本所審核通過之科系) DME (or the department passed the review of our department)
	材料力學 Mechanics of Materials	3	機械系(或經本所審核通過之科系) DME (or the department passed the review of our department)
	圖學 Graphics	1	機械系(或經本所審核通過之科系) DME (or the department passed the review of our department)
	工程材料 Engineering Materials	3	機械系(或經本所審核通過之科系) DME (or the department passed the review of our department)
	自動控制(一) Automatic Control (I)	3	機械系(或經本所審核通過之科系) DME (or the department passed the review of our department)
	熱力學(一) Thermodynamics(I)	3	機械系(或經本所審核通過之科系) DME (or the department passed the review of our department)
	流體力學 Fluid Mechanics	3	機械系(或經本所審核通過之科系) DME (or the department passed the review of our department)
	機械製造 Mechanical Manufacturing	3	機械系(或經本所審核通過之科系) DME (or the department passed the review of our department)
	機動學 Mechanism	3	機械系(或經本所審核通過之科系) DME (or the department passed the review of our department)
機械設計原理 Principles of Mechanical Design	3	機械系(或經本所審核通過之科系) DME (or the department passed the review of our department)	
總學分(31 學分) Total Credit (31 credits)	31		