

# 化学科進学学生への注意

## 化学科を卒業するための要件

理学部化学科を卒業するには教養学部第2学年において専門科目18単位（必修5科目12単位及び「初級化学英語演習」を除く選択科目6単位以上）を学修するほか、第3学年及び第4学年において合計62.5単位以上の専門科目（ただし教養学部第2学年の専門科目及び教職課程科目を除く）を学修しなければならない。

なお、以下の科目（単位数）は必修とする。

- (1) 化学科で行われる専門科目のうち、講義・演習科目から20単位以上
- (2) 化学科で行われる全実験科目（分析化学無機化学実験、有機化学実験、物理化学実験ならびに化学特別実験の合計25単位）
- (3) 研究倫理0.5単位

理学部便覧の理学部規則ならびに教養学部第2学年専門科目履修規則を参照すること。

他学部科目については、所定の手続きを経た上で、3単位まで卒業に要する認定科目として認めることができる。

## 学修科目の決定

化学科において学修する科目の決定については教務担当教員の学修指導を受けたのちUTAS（学務システム）より、履修登録を行なう。

化学科において行われる授業科目は教養学部第2学年の科目をも含めて学部で化学を専攻する者にとって必要かつ十分な知識を系統的に網羅するよう配慮されている。この中から可能な限り多くの科目を学修することが望ましいが、各人の興味と能力に応じて、他学科の専門科目を履修し、単位を取得することも出来る。

## 実験科目学修のための要件

第3学年において実験科目（分析化学無機化学実験、有機化学実験、物理化学実験）を履修するためには、教養学部第2学年専門科目における必修科目12単位（化学熱力学Ⅰ、量子化学Ⅰ、有機化学Ⅰ、無機化学Ⅰ、分析化学Ⅰ）のうち、8単位以上を取得していなければならない。

### 化学特別実験（卒業研究）のための要件

化学特別実験（卒業研究）を行うためには、次の3つの要件を全て満たしていなければならない。

- (1) 理学部化学科を卒業するのに必要な教養学部第2学年の専門科目18単位（必修5科目12単位及び「初級化学英語演習」を除く選択科目6単位以上）を取得（取得見込を含む）していること。

ただし、選択科目として指定されていない理学部の第2学年専門科目及び教養学部第2学年における他学部専門科目（教職課程科目を除く）を化学科の専門科目として認定することを希望する者は、化学科教務委員会の許可を得ること。

- (2) 第3学年における必修科目10単位（分析化学無機化学実験、有機化学実験、物理化学実験）を取得（取得見込みを含む）していること。
- (3) 第3学年終了時において、3年SセメスターおよびAセメスターに開講される化学科講義科目の中から18単位以上を取得（取得見込みを含む）していること。

### 試験について

- 1) 試験科目は担当の教員が定めた日時に行われる。
- 2) 病気、その他やむをえない事故によって1)で定められた試験を受験できなかった学生は、直ちに事由を証明する書類（たとえば医師の診断書）を添えて事務室に届けること。その場合には科目担当教員の指示に従い追試験を受けることができる。

## **Information for undergraduate students in the Department of Chemistry**

### **Credit requirements for graduation**

The Department of Chemistry at the Faculty of Science requires students to have acquired 18 credits from specialized courses during their second year at the College of Arts and Sciences (12 credits of five compulsory courses and more than 6 credits of elective courses except “Elementary Academic English for Chemistry”).

Students must complete a total of 62.5 credits or more of specialized courses (excluding specialized courses in the second year of the College of Arts and Sciences and teacher training programs) in their third and fourth years. The following courses and number of credits shall be fulfilled:

- (1) 20 credits or more from lectures and seminar courses of specialized courses offered by the Department of Chemistry; and
- (2) All laboratory courses offered by the Department of Chemistry (a total of 25 credits consisting of “Laboratory work in Analytical Chemistry and Inorganic Chemistry”, “Laboratory work in Organic Chemistry”, “Laboratory work in Physical Chemistry” and “Special Laboratory work in Chemistry”).
- (3) “Research Ethics” 0.5 credit

Please refer to the Rules for the Faculty of Science in the School of Science Student Handbook as well as the College of Arts and Sciences Second Year Specialized Course Syllabus.

Students may request to have up to three credits acquired from courses of other faculties to be accepted as credits required for graduation.

### **Course Registration**

Students are required to register for their courses by attending a guidance delivered by the professor-in-charge of academic affairs followed by registration on UTAS (an administration system).

Courses offered by the Department of Chemistry, including those in the second year at the College of Arts and Sciences are designed to systematically provide necessary and sufficient knowledge for undergraduate education in chemistry. Students are advised to take as many courses as possible from among those courses; however, depending on students’ interests and capabilities, they are also encouraged to take specialized courses offered by other departments and acquire credits.

### **Pre-requisites for laboratory courses**

To take laboratory courses in the third year (“Laboratory work in Analytical Chemistry and Inorganic Chemistry”, “Laboratory work in Organic Chemistry”, and “Laboratory work in Physical Chemistry”), students are required to have already acquired 8 credits or more out of 12 credits of the compulsory courses during their second year at the College of Arts and Sciences. The compulsory courses are Chemical Thermodynamics I, Quantum Chemistry I, Organic Chemistry I, Inorganic Chemistry I, and Analytical Chemistry I.

### **Pre-requisites for “Special Laboratory work in Chemistry” (graduation research)**

All three of the following requirements must be met for “Special Laboratory work in Chemistry” (graduation research):

- (1) At least 18 credits of specialized courses (12 credits of five compulsory courses and more than 6 credits of elective courses except “Elementary Academic English for Chemistry”) in the second year at the College of Arts and Sciences have been or will be acquired. However, if you desire to take a course which is not listed as a designated elective course in the Faculty of Science or another departments’ specialized courses in the second year of the College of Arts and Sciences except teacher training programs to be accepted as a specialized course of the Department of Chemistry, permission must be obtained from the Academic Affairs Committee of the Department of Chemistry;
- (2) 10 credits of the compulsory courses (“Laboratory work in Analytical Chemistry and Inorganic Chemistry”, “Laboratory work in Organic Chemistry”, and “Laboratory work in Physical Chemistry”) during their third year have been or will be acquired; and
- (3) 18 credits or more out of the lecture courses of the Department of Chemistry which are offered in the S and A semesters of the third year have been or will be acquired at the end of the third year.

### **Examinations**

- 1) Course examinations shall be conducted on the dates and times specified by the professor-in-charge.
- 2) If a student is not able to sit for the course examinations set forth in 1) due to illness or other unavoidable accidents, the student must immediately notify the Department of Chemistry office and submit a document that describes the reason (e.g., a medical certificate issued by a doctor). In such case, the student may take make-up examinations in accordance with the instructions of the professor-in-charge of the course.