

Minor Title	Minor in Biochemistry
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Offered to students admitted to Year 1 in	2012
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**Objectives:**

The Minor in Biochemistry offered by the Department of Biochemistry is designed to provide students from all backgrounds with a multidisciplinary perspective on contemporary biochemistry and molecular biology. This minor curriculum incorporates significant flexibility to allow students to select courses that will complement the individual student's Major.

**Learning Outcomes:**

Students should be able to:

- describe the fundamentals of biochemistry and molecular biology, and apply biochemical knowledge appropriately and effectively;  
(by means of coursework and laboratory-based learning in the curriculum)
- integrate knowledge regarding the structure and function of biological molecules and how they come together to form the systems that make up life;  
(by means of coursework and laboratory-based learning in the curriculum)
- develop a general interest in biochemistry and recognize the inter-relationship of biochemistry with other disciplines.  
(by means of coursework and laboratory-based learning in the curriculum)

**Impermissible Combination:**

Major in Biochemistry

**Required courses (36 credits)****1. Introductory level courses (18 credits)**

BIOC1600 Perspective in biochemistry (6)  
 BIOC2600 Basic biochemistry (6)  
 BIOC2610 Introduction to molecular genetics (6)

**2. Advanced level courses (18 credits)**

At least 18 credits selected from the following courses:

BIOC3601 Metabolism (6)  
 BIOC3602 Understanding metabolism diseases (6)  
 BIOC3603 Principles of molecular genetics (6)  
 BIOC3604 Essential techniques in biochemistry and molecular biology (6)  
 BIOC3605 Sequence bioinformatics (6)  
 BIOC3606 Molecular medicine (6)  
 BIOC3607 Directed studies in biochemistry (6)  
 BIOL3402 Cell biology and cell technology (6)  
 BIOL3404 Protein structure and function (6)  
 CHEM3145 Principles of chemical biology (6)  
 BIOC4610 Advanced biochemistry I (6)  
 BIOC4611 Advanced biochemistry II (6)  
 BIOC4612 Molecular biology of the gene (6)  
 BIOC4613 Advanced techniques in biochemistry and molecular biology (6)  
 CHEM4145 Medicinal chemistry (6)

**Notes:**

- A course may appear as required course in two or more Science majors/minors. Each course can only be considered to satisfy the requirement of one major or one minor, even if that appears in the curriculum of two majors/minors. Students have to select another course to replace the course in the second major/minor.
- Courses at the advanced level are subject to change.

**Remarks:**

Important! Ultimate responsibility rests with students to ensure that the required pre-requisites and co-requisite of selected courses are fulfilled. Students must take and pass all required courses in the selected primary science major in order to satisfy the degree graduation requirements.