



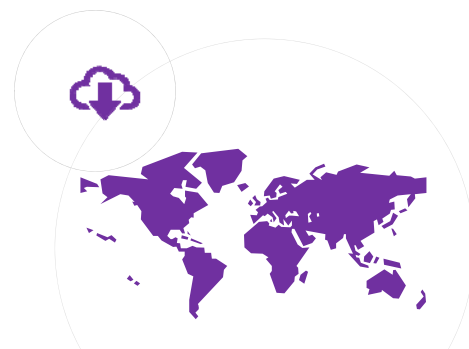
Mahidol University
Wisdom of the Land



SCBM PROGRAM OVERVIEW

BIOMEDICAL SCIENCE (INTERNATIONAL PROGRAM)

August 25th, 2021



<https://sim.sc.mahidol.ac.th/>



SCBM PROGRAM

Our SCBM was found in the year 2014, and the curriculum has been revised in the year 2019. Now, we run our academic courses with 4-year program in both Salaya and Phayathai campus.

Our double degree program has been collaborated with the University of Sussex, United Kingdom.



US
UNIVERSITY
OF SUSSEX



Mahidol University





PROGRAM SPECIFICATION

Bachelor of Science (Biomedical Science)

4-year Program

Plan-A: 4 years at MUSC = 132 credits (Y1-2 at Salaya / Y3-4 at Phayathai)

Plan-B: 2 years at MUSC = 81 credits + 2 years at the University of Sussex, UK

Teaching Language: English

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Course Category	Credits	
	Plan A	Plan B
1. General Education Courses	30^a	30^a
1) Social Sciences and Humanities		
2) Languages		
3) Science and Mathematics		
4) Health and Recreation		
2. Specific Courses	96	45^b+240^c
1) Core Courses	19	19 ^b +0 ^c
2) Major Required Courses	67	26 ^b +150 ^c
3) Major Elective Courses (Module)	10	0 ^b +90 ^c
3. Free Elective Courses	6	6
Total Credits	132	81^b+240^c

^a Students have to complete the General Education courses. Students may choose the General Education courses provided by other programs/ departments/faculties to fulfill the credit requirement. ^b Credits while studying at Mahidol University ^c Credits while studying at the University of Sussex



SPECIFIC COURSES



MEDIUM.COM
The '2+2' programme enabled me to graduate from two universities

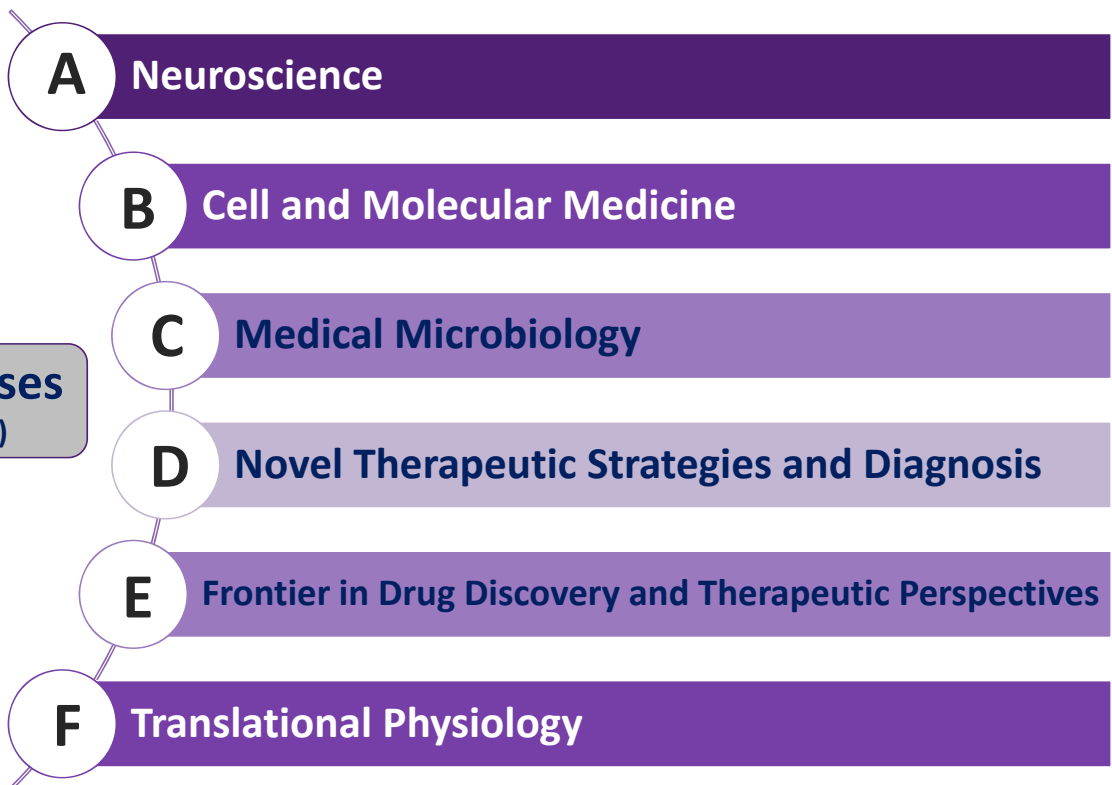


Knowledge / Skills

- Cell & Molecular
- Biochemistry
- Anatomy & Histology
- Physiology
- Microbiology
- Pathology
- Pharmacology
- Medical Genetics

Scientific Research

- Bioinformatics
- Gene Technology
- Microscopy & Bio-imaging
- Cell Culture
- Experimental Animal Use
- Seminar in Biomedical Science
- Scientific Writing
- Senior Project





STUDY PLAN AT THE SUSSEX UNIVERSITY

Year Two
Module
Cell Regulation and Cancer
Structural Basis of Biological Function
Genetics and Genomics
Haematology and Anatomy
Clinical Biochemistry
Medical Microbiology
Combating Disease
Virology



Year Three
Individual Research Project
Six options from a wide range, e.g. Cell Signalling Immunology in Health and Disease Molecular Genetics Regulating the Transcriptome Neuronal Transduction and Transmission Innovation in Bioscience and Medicine Genomics and Bioinformatics Protein Form and Function Molecular Pharmacology Genome Stability, Genetic Diseases and Cancer Post Transcriptional Control of Gene Expression Neuronal Plasticity and Gene Regulation Structure and Function in the Brain Advanced Human Virology and Bacteriology Advanced Haematology and Transfusion Science Taught at research level



GRADUATION REQUIREMENTS

- Complete **132 credits** as stated in the curriculum
- Have a minimum of **2.00 cumulative GPA**
- Pass the criteria for **English competency, IELTS 6.0**
- Follow **Mahidol University Regulations** on Diploma and Undergraduate Studies

*** Experience on scientific project via “Senior Project”**

Graduates' learning outcomes

At the end of the program, successful students will be able to:

- | | |
|-------------|--|
| PLO1 | Synthesize knowledge and information acquired for medical-related problems to protect and improve the health of individuals |
| PLO2 | Carry out laboratory-based experiments to provide information about prevention, diagnosis, and treatment of diseases in accordance with international standard methodology |
| PLO3 | Create an independent project in biomedical science analyzed from scientific journals and laboratory reports along with laboratory safety skills and professional code of conduct to solve medical-related problems |
| PLO4 | Communicate concepts of biomedical science clearly and purposefully with target audiences in English, in both written and oral forms with appropriate information technologies in an organized manner |
| PLO5 | Work independently and coordinate with others to achieve team goals based on roles and responsibilities of a life science researcher |

PLO – Program Learning Outcome



CAREER OPPORTUNITY & FURTHER STUDY

- Scientist or research assistant in biomedical and diagnostic clinical laboratories
- Product specialist in medical instrument, biotechnology and pharmaceutical companies
- Health communicator and counselor

- Graduate programs in biomedical science and related fields including anatomy and structural biology, biochemistry, microbiology and immunology, pathobiology, pharmacology, physiology, and other programs in life sciences
- Undergraduate program in medicine or allied health programs



OUR ALUMNI

JOB

- KTH Royal Institute of Technology, Stockholm
- University of Dundee & Tartan Cell Technologies, Ltd
- JD.COM, Beijing, China

- M3D Laboratory (Start up : Medical Device Company)
- S&J International Enterprises Public Company Limited
- Biopharmatect Co Ltd
- Ramathibodi Hospital
- Siriraj Hospital
- Bangkok Hospital, Pattaya
- Mahidol Vivax Research Unit, FTM, Mahidol University

FURTHER STUDY

- KTH Royal Institute of Technology, Stockholm, SWEDEN
- University of Dundee, Dundee, SCOTLAND
- University of Edinburgh, Edinburgh, SCOTLAND
- University of Nottingham, Nottingham, UK
- Shanghai Jiao Tong University, Shanghai, CHINA

- University of Auckland, Auckland, NEW ZEALAND
- Poznan University, Poznan, POLAND
- Medical University of Lubin, Lubin, POLAND

- Master Degree in THAILAND

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BIOMEDICAL SCIENCE PROGRAM



Synthesize knowledge and information / Carry out laboratory-based experiments

Create an independent project in biomedical science

Communicate concepts of biomedical science / Work independently and coordinate

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