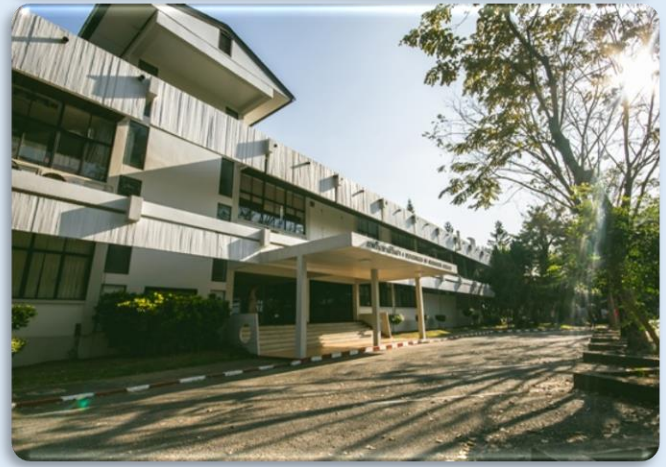
GEOLOGICAL SCIENCES

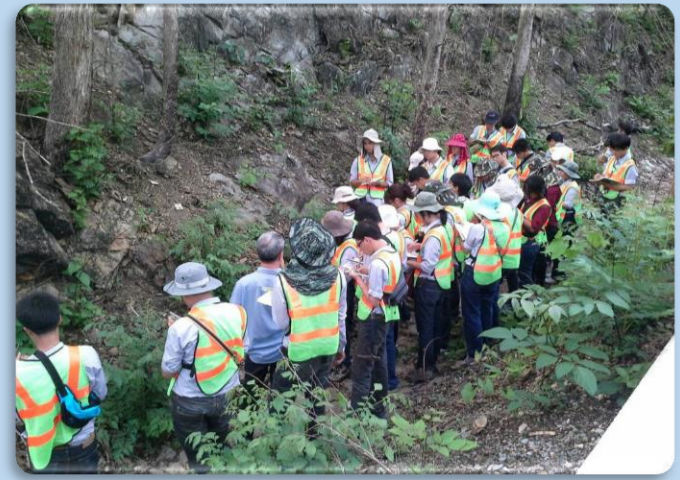
ABOUT US

The Department of Geological Sciences is in a region of well exposed geologic phenomena readily accessible from the campus. Classroom instruction is related to field occurrences by field trips and independent student observation. A wide variety of igneous, sedimentary, and metamorphic rocks, geologic structures, stratigraphic features, fossils, land forms and mineral deposits are found locally. Many aspects of these are of economic and environmental importance. Field training in geology is an integral part of the Department's program, and consists of one course in field methods offered during the school year and two summer field training courses. Excellent opportunities exist for field research and this is commonly integrated with laboratory research.



ACADEMIC

The Department enrolls about 60 geology students and 40 gemology students each year. In addition, service courses are offered for other study programs that require basic knowledge in geology. Elective courses in geology are also available. For post-graduate study, students may choose their field of study from the following: structural geology; stratigraphy, paleontology, and sedimentology; mineralogy and petrology; economic geology; geochemistry; hydrogeology; and applied geology. The Department is capable of enrolling 15-20 post-graduate students (M.S. and Ph.D.) each year.



Faculty Members

Apichet BOONSOONG, PhD (Earth Sciences)
Boontarika SRITHAI, PhD (Geology)
Burapha PHAJUY, PhD (Geology)
Kannipa Motanated, PhD (Geology)
Kanyarat KWANSIRIKUL, PhD (Geology)
Niti Mankemthong, PhD (Geological Sciences)
Panjawan THANASUTHIPITAK, PhD (Geology)
Patcharin K. Jundee, PhD (Geology)
Phisit LIMTRAKUN, PhD (Geology)
Pisanu WONGPORNCHAI, Dr. mont (Geowissenschaften)
Pitaksit Ditbanjong, PhD (Geology)
Rattanaporn Fongngern, PhD (Geological Sciences)
Rattapol Ampol, MS (Geology)
Rungroj Benjakul, MS (Geology)
Sampan SINGHARAJWARAPAN, PhD (Geology)
Schradh SAENTON, PhD (Environmental Science & Engineering)
Suwimon UDPHUAY, PhD (Geophysics)
Weerapan SRICHAN, PhD (Geology)
Wittaya KHANDHAROSA, Dr.rer.nat (Geology)
Yupa Thasod, PhD (Geology)

http://www.geol.science.cmu.ac.th

Undergraduate Curriculum

B.S. (GEOLOGY)

First Year

Fundamental English 1
Integrated Mathematical Sciences
Chemistry 1
Calculus 1
Physics 1

Fundamental English 2
Basic Biology 1
Chemistry 2
Physics 2
Physical Geology

Second Year

Critical Reading & Effective Writing
Historical Geology
Mineralogy
Optical Mineralogy
Humanities & Social Sciences (3)
Learning through Activities (1)

English in Science & Technology
Practice in Field Geology
Lithology
Paleontology
Geological Data Processing
Humanities & Social Sciences (3)

Summer Session
Regional Field Geology

Third Year

Geomorphology
Geochemistry
Principles of Sedimentology
Graphic Methods in Geology
Humanities & Social Sciences (3)
Science & Mathematics (3)

Learning through Activities (2)
Structural Geology
Igneous-Metamorphic Petrology
Stratigraphy
Exploration Geophysics
Free Elective (3)

Fourth Year

Field Geology
Geology of Thailand
Major Electives (6)
Seminar*
Independent Study in Geology*

Major Electives (6)
Free Elective (3)
Seminar*
Independent Study in Geology*

*These courses can be taken in either semester 1 or 2.

B.S. (GEMOLOGY)

First Year

Fundamental English 1
Integrated Mathematical Sciences
Chemistry 1
Calculus 1
Physics 1

Fundamental English 2
The World of Science
Basic Biology 1
Chemistry 2
Physical Geology

Second Year

Critical Reading & Effective Writing
Introduction to Gemology
Introduction to Crystallography
Optical Crystallography
Entrepreneurship and Business
Humanities & Social Sciences (3)

English in Science & Technology
Introduction to Computer
Descriptive Mineralogy for Gem.
Chemical Fund. of Gemology
Lithology and Petrography
Gemstone Deposits in Thailand

Summer Session
Field Gemology

Third Year

Gems Identification
Organic Gems
Diamond Grading
Prin. Management & Organization
Humanities & Social Sciences (3)
Free Elective (3)

Learning through Activities (2)
Colored Stones Grading
Gemstone Deposits
Synthetic and Imitated Gems
Jewelry Production
Production & Op. Managements

Summer Session
Training in Gems & Jewelry Industry

Fourth Year

Gemstone Enhancements
Major Electives (6)
Free Elective (3)
Seminar*
Gemology Project*

Major Electives (6)
Seminar*
Gemology Project*

Note: *B.S (Gemology) also offers Cooperative Education Plan.*
These courses can be taken in either semester 1 or 2.

Available Graduate Programs:

- MS & PhD (Geology)
- MS (Applied Geophysics)
- MS (Petroleum Geophysics) (*Int'l Program*)
- MS & PhD (Environmental Science) (*Int'l Program*)

For more detail about the program, electives and course description, please visit the following website.