

ABOUT THE PROGRAM

This programme combines elements of flora, fauna and genetics as well as adapting the latest technological elements for natural resource management for ecological, economic and social balance, and ensuring the richness of natural resources will be maintained. Natural resources could create wealth but must be exploited sustainably. In line with the university's mission, vision and goals towards making UMK a centre of excellence in both academic and research in the area of Environmental Management, Natural resources and Entrepreneurship, this programme adapting 3+1 in the curriculum for students to carry out 1 year of industrial training in any industry with the consent of the Faculty, will produce graduates who are knowledgeable and skilled to manage our natural resources effectively while maintaining the environment. The environment is an important component of life while maintaining stability, natural resources potential will be optimized while maintaining possible economic growth.

AMONG THE COURSES OFFERED

Year One

- Natural Resources Ecology
- Biodiversity
- Molecular Biology and Genetics
- Plant and Animal Systematics

Year Two

- Geographic Information System (GIS)
- Remote Sensing
- Entomology
- Natural Resources Economics

Year Three

- In-situ and Ex-situ conservation
- Population Biology
- Park and wildlife management
- Ecological modelling

Year Four

- Industrial Attachment

FURTHER STUDY OPTIONS

Bachelor of Applied Science (Natural Resources Science) with Honours provide a pathway to postgraduate programmes including Master of Science offered by Centre of postgraduate studies in UMK and other universities.

CAREER PROSPECTS

- Research Officer/ Science Officer
- Lecturer/ Educator
- Wildlife Officer
- Entrepreneur in natural resource management, Ecotourism, Agricultural Park / Tourist Guide/ Eco Tour Guide/ Manager of Wildlife Conservation Centre
- Research Officer in product development in company, manufacturing and industrial/Service and management in industry/ The company is based on the exploitation of natural resources as business materials.

ABOUT THE PROGRAM

Universiti Malaysia Kelantan (UMK)'s Sustainable Science programme has been offered since 2012 by the Faculty of Earth Science. This Bachelor of Applied Science (Sustainable Science) with Honours programme will provide you with a broad and practical insight in preserving and protecting our environment for the well-being of future generations, combating climate change, advocating for laws and procedures to improve sustainability. The curriculum strikes a balance between theory and practical, focusing on a wide range of transferable skills which integrate the component of the environment, social, economic and governance. The innovative and collaborative learning experience employed at campus and faculty will aid in enhancing your core competencies in environmental science and management.

AMONG THE COURSES OFFERED

Year One

- Chemistry in Applied Science
- Environmental Biology
- Introduction to Statistic and Spatial Analysis
- Introduction to Environmental Law, Policy & Ethics
- Introduction to Environmental Sustainability

Year Two

- Atmospheric Science
- Introduction to GIS
- Introduction to Remote Sensing
- Instrumentation and Environmental Analysis
- Soil Sustainability
- Environmental Policy and Governance

Year Three

- Water Sustainability
- Environmental Risk Assessment
- Environmental Economic
- Environmental Impact Assessment (EIA)
- Occupational Safety, Health and Environment
- Environmental Management System (EMS)
- Wastewater Treatment Technology

Year Four

- Environmental Remediation Technology
- Social Impact Assessment (SIA)
- Environmental GIS
- Environmental Statistics

1. Minimum of 3 principals with A-Level examinations, **OR**:
2. International Baccalaureate (IB) (with one sitting) **OR**:
3. For countries that have not adopted the UK examination system or the International Baccalaureate (IB), the entry will be considered based on their qualifications recognized by the Malaysian Qualifications Agency (MQA).

English Proficiency

- TOEFL iBT minimum score 35 or:
- IELTS minimum band 4.5 or:
- MUET minimum high band 2; or
- Pearson Test of English minimum score 43; or
- Cambridge English Qualifications & Tests minimum score 147

CAREER PROSPECTS

1. Career Path 1: Environmental Consult
2. Career Path 2: Safety, Health, and Environment Executive/Officer
3. Career Path 3: Environmental Laboratory Executive/Officer
4. Career Path 4: Environmental Officer/ Executive
5. Career Path 5: Sustainability Officer/ Executive
6. Career Path 6: Hygiene Officer/ Executive
7. Career Path 7: Environmental Risk Liability

UPU CODE

UL6440001



BACHELOR OF APPLIED SCIENCE (GEOSCIENCE) WITH HONOURS (SEG)

DURATION
4 YEARS

ABOUT THE PROGRAM

The Geoscience Programme in UMK is an entrepreneurship-based programme which never offered by any Public Universities in Malaysia. The programme will provide students with an understanding of core geoscience concepts such as mineralogy, geochemistry, geophysics, sedimentology and stratigraphy. It will also emphasize aspects of industrial needs, natural resources and entrepreneurship. Upon registered with this programme, the students will be involved with a lot of fieldworks, and outdoor activities to give a broad multidisciplinary understanding on the earth challenge today, along with practical field skills including mapping, remote sensing and GIS. The graduates are expected to specialize in the management of geological resources to ensure the continuity of the resources for future generations benefit.

AMONG THE COURSES OFFERED

Year One

- Applied Chemistry
- Basic Mathematics
- Applied Physics
- Geochemistry
- Crystallography and mineralogy
- Introduction and Professional Ethics in Geoscience
- Student In Enterprise Programme

Year Two

- Stratigraphy and Earth History
- Sedimentology
- Introduction to GIS
- Introduction to Remote Sensing
- Geomorphology
- Paleontology
- Geophysics
- Geological Mapping
- Research Methods and Scientific Writing

Year Three

- Petrology
- Mineral Resources
- Engineering Geology
- Petroleum Geology
- Structural Geology and Geotectonics
- Hydrogeology
- Environmental Geology
- Malaysia Geology and Fieldwork

Year Four

- Final Year Project
- Industrial Training
- Elective subjects**
- Rock Engineering
- Petroleum Exploration
- Petroleum Production
- Groundwater Monitoring
- Geoheritage and Geotourism
- Industrial Mineral Resources
- Metallic Mineral Resources
- Groundwater Exploration and Production
- Geohazard

FURTHER STUDY OPTIONS

This program will assist you in your transition to university to further studies in various fields that relate to geosciences, geology, GIS, engineering geology, petroleum geology, mineralogy, hydrogeology, paleoclimatology and others.

CAREER PROSPECTS

Upon graduation, all undergraduates in this field will be highly demanded as professionals in both government (i.e.: geologist, science officers, researchers, lecturers, mining officers, consultant) and private sectors (i.e.: Petroleum Geologist, Geophysicist, Mineralogist, Hydrogeologist) and also Agencies and Statutory Bodies.

UPU CODE

UL6443001



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Entrepreneurship
is Our Thrust

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