



SMMRE
THE ONE & ONLY



PUSAT PENGAJIAN KEJURUTERAAN BAHAN DAN SUMBER MINERAL SCHOOL OF MATERIALS AND MINERAL RESOURCES ENGINEERING

UNDERGRADUATE PROGRAM

ADVANCE
ENGINEERING

We Are Different | We Are Special

US6527001 BACHELOR OF MATERIALS ENGINEERING WITH HONOURS



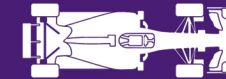
The programme covers multidisciplinary materials' synthesis, product development and fabrication for semiconductor, oil and gas, steel, advanced composite, polymer, ceramic and biomedical industries.

US6524002 BACHELOR OF MINERAL RESOURCES ENGINEERING WITH HONOURS



The only programme in Malaysia that offers specialization in mining and/or quarrying and processing of metallic and non-metallic minerals through conventional and advanced technologies. This program also includes simulation and modelling approaches, especially for mine and plant design as well as comminution and sizing related circuit design.

US6524003 BACHELOR OF POLYMER ENGINEERING WITH HONOURS



The programme focuses on synthesis of new polymers, processing of polymeric materials and development of polymer product in the fields of electronics, medical, aeronautics, automotive and oil & gas.



PIONEERING

All our programmes are the pioneer academic programmes of the nation in the related field of study since 1980s.



UNIQUE

Each programme is unique in its own way and the combination of these programmes covers aspects of mineral resources acquisition and processing, materials characterization and fabrication as well as product development and manufacturing.



INDUSTRY DRIVEN

From day one, all the programmes were initiated to cater range of materials and mineral resources related industries from mining and quarrying up to manufacturing and semiconductor industries.

GET IN TOUCH

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School Of Materials And
Mineral Resources Engineering,
USM

<http://material.eng.usm.my>



SCHOOL OF MATERIALS AND MINERAL RESOURCES ENGINEERING

<http://material.eng.usm.my>

93.3%*
GRADUATE EMPLOYABILITY
Among The Highest Paying

* BASED ON DATA 2022/2023 (AS OF MARCH 2023)

MATERIALS ENGINEERING

- Materials Engineer
- Manufacturing Engineer
- QA Engineer
- Corrosion Engineer
- Welding Engineer
- NDT Inspector
- Process Engineer
- Supplier Quality Engineer
- Product Engineer
- NPI Engineer
- Industrial Engineer
- Research Officer
- Science Officer
- R&D Engineer
- Other Related Position**

MINERAL RESOURCES ENGINEERING

- Mining Engineer
- Quarry Engineer
- Mineral Processing Engineer
- Extractive Metallurgist
- Drilling Engineer
- Safety Engineer
- Blasting Specialist/shotfirer
- Technical Executive in Mineral Based Industry
- Technical Executive in Oil and Gas Industries
- Mining Officer
- Research Officer
- Other Related Position**

POLYMER ENGINEERING

- Chemist (Rubber & Latex)
- Polymer Engineer
- Polymer Chemist
- Polymer Scientist
- Process Engineer
- Production Engineer
- Operation Engineer
- R&D Engineer
- QA Engineer
- Product Specialist
- Technical Executive in Petrochemical Industry
- Technical Executive in Composites Industry
- Product Design Engineer
- Research Officer
- Other Related Position**

JOB OPPORTUNITIES

ENTRY REQUIREMENT

MATRICULATION / STPM / PASUM / ASASI UiTM
min CGPA 2.50 (with C+ in Math)

DIPLOMA
min CGPA 3.0

4 Years
8 Semesters



PROPERTIES & PROCESSING

- ✓ Properties of materials, characterization & basic design
- ✓ Mineral processing, geomatics, petrography & mineralogy
- ✓ Polymer characterisation & processing



INTEGRATED DESIGN PROJECT & FINAL YEAR PROJECT

- ✓ Materials selection, Integrated Design Project & Final Year Project
- ✓ Environmental engineering, economic assessment, blasting technology, mine and plant design & Final Year Project
- ✓ Polymer product design and management & Final Year Project



FUNDAMENTAL KNOWLEDGE

- ✓ Basic Materials Engineering (Structure & Properties)
- ✓ Basic Mineral Resources Engineering (Computing tools & engineering geology)
- ✓ Basic Polymer Engineering (Structure & Properties)



ADVANCED KNOWLEDGE &

- ✓ Advanced materials, nanomaterials, processing & analysis. Trip to industry & industrial training
- ✓ Mining methods, quarrying, geophysics and extractive metallurgy. Site visits & industrial training
- ✓ Fabrication and Failure Analysis. Trip to industry & industrial training

ENGINEER YOUR FUTURE WITH US



ACCREDITED BY
BOARD OF ENGINEERS MALAYSIA



- ✓ US6527001 Bachelor of Materials Engineering with Honours
- ✓ US6524002 Bachelor of Mineral Resources Engineering with Honours
- ✓ US6524003 Bachelor of Polymer Engineering with Honours

