



Strengthening Uganda's Mineral Sector through Labour-Market Aligned Curricula Reforms: A Comprehensive Review of BSc/MSc/PhD in Geology Curricula and Development of Industry-aligned Short Courses at Makerere University
MAK- SDMU Project

Terms of Reference (ToR)

Consultancy for Geoscience Curriculum Development

Project Title

Strengthening Uganda's Mineral Sector through Labour-Market Aligned Curricula Reforms: A Comprehensive Review of BSc/MSc/PhD Geology Curricula and Development of Industry-aligned Short Courses at Makerere University

Funding Programme:

Sustainable Development of the Mineral Sector in Uganda (SDMU)

Funding Partners:

Government of the Federal Republic of Germany and European Union through Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and Ministry of Energy and Mineral Development (MEMD), Uganda.

Implementing Institution

Makerere University (College of Natural Science, Department of Geology and Petroleum Studies)

Duty Station

Makerere University, Kampala, Uganda, with travel to selected stakeholder locations within Uganda.

Consultancy Type

Individual Consultant

Duration

Eight (8) months on a call-off/one-off assignment basis.

Expected Physical Presence

The consultant will be required to be available at the Department of Geology and Petroleum studies for up to 64 days during the assignment period to participate in stakeholder consultations, curriculum development workshops, and validation meetings.

Background

Makerere University, through the Department of Geology and Petroleum Studies, is implementing a project titled "Strengthening Uganda's Mineral Sector through Labour-Market Aligned Curricula Reforms: A Comprehensive Review of BSc/MSc/PhD Geology Curricula and Development of Industry-Aligned Short Courses at Makerere University."

The project seeks to strengthen human capital development in Uganda's mineral sector by reviewing and modernizing geology training programmes to better respond to labour market

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needs, emerging technologies, industry expectations, national development priorities, and international best practices. The project further seeks to develop industry-responsive short courses that enhance the competencies of professionals and practitioners within Uganda's mining and mineral value chain.

To support this process, Makerere University seeks to engage a qualified Geoscience Consultant to provide technical guidance throughout the curriculum review and development process over a period of eight (8) months.

2. OBJECTIVE OF THE CONSULTANCY

The overall objective of the consultancy is to provide technical leadership and expert guidance during the review, reform, validation, and finalization of BSc, MSc, and PhD Geology curricula and the development of industry-aligned short courses to ensure their relevance, quality, competitiveness, and alignment with labour market demands.

3. SCOPE OF WORK

The consultant shall work closely with the project team, departmental staff, industry stakeholders, regulatory bodies, alumni, and development partners to undertake the following assignments:

a) Curriculum Review and Gap Analysis

- i. Guide the technical review of existing BSc, MSc, and PhD Geology curricula.
- ii. Assess the adequacy, relevance, and currency of existing programme content.
- iii. Ascertain that the identification of content gaps, outdated courses, redundancies, and misalignment with labour market demands is thorough and evidence-based.
- iv. Review programme structures against national qualification frameworks, competency-based curriculum requirements, and international best practices.

b) Curriculum Reform and Modernization

- i. Appraise recommendations for restructuring and modernization of course content, delivery approaches, and learning experiences.
- ii. Ensure that proposed curricular reforms adequately address emerging trends and technologies in geosciences, mining, environmental management, digital geoscience applications, and sustainable mineral resource development.
- iii. Ensure integration of practical training, field-based learning, laboratory competencies, industry exposure, entrepreneurship, innovation, and digital skills.
- iv. Review proposed teaching, learning, and assessment methods for appropriateness and effectiveness.

c) Stakeholder Engagement and Validation

- i. Participate in stakeholder consultation meetings, workshops, focus group discussions, validation meetings, and dissemination events.
- ii. Provide technical input during stakeholder engagements.
- iii. Ensure that stakeholder feedback is adequately analyzed and incorporated into curriculum reform processes.

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iv. Support consensus building among academic, industry, government, and professional stakeholders.

d) Quality Assurance and Standards Compliance

- i. Ensure that draft curricula align with national higher education policies and competency-based curriculum requirements for higher education institutions in Uganda.
- ii. Ensure alignment with regional and international standards and best practices in geology and geoscience education.
- iii. Ensure reviewed curricula address national development priorities, mineral sector needs, sustainability considerations, and global trends.
- iv. Guarantee that learning outcomes, programme objectives, delivery modes, and assessment criteria are realistic, inclusive, measurable, and competency-based.

e) Reporting and Documentation

- i. Prepare technical reports documenting findings, recommendations, and outcomes of consultancy assignments.
- ii. Review and provide technical comments on curriculum drafts and related documents.
- iii. Submit periodic progress reports and a final consultancy report summarizing activities undertaken, findings, recommendations, and outcomes.

Expected Deliverables

The consultant shall deliver:

1. Inception report outlining methodology, work plan, and assignment schedule in one (1) month after starting the assignment.
2. Technical review report on existing BSc (Geology Subject), MSc in Geology, and PhD in Geology curricula in two (2) months after starting the assignment
3. Gap analysis report highlighting strengths, weaknesses, labour market mismatches, and areas requiring reform in the curriculum two-and-a half (2.5) months after starting the assignment
4. Technical appraisal reports on draft curricula and proposed reforms.
5. Stakeholder consultation and validation reports.
6. Technical recommendations on curriculum modernization and competency-based curriculum integration.
7. Final consultancy report consolidating all assignments undertaken and recommendations made during the consultancy period in two (2) weeks after starting the assignment.
- 8.

Duration of Assignment

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The consultancy shall be undertaken over a period of eight (8) months from the date of contract signing.

The consultancy is expected to be intermittent and assignment-based, with inputs required during key stages of curriculum review, stakeholder consultations, validation workshops, and finalization processes.

Reporting Arrangements

The consultant shall report directly to the Principal Investigator/Project Coordinator and work closely with the Curriculum Review Committee, Project Accreditation lead, and the Department of Geology and Petroleum Studies.

Required Qualifications and Experience

The ideal consultant should be a Ugandan who possesses:

a) Academic Qualifications

- PhD in Geology, Geosciences, Earth Sciences, Mining Geology, Petroleum Geoscience, Environmental Geoscience, or a closely related discipline.

b) Professional Experience

- Minimum of fifteen (15) years of geoscience teaching and research, academic leadership or curriculum development experience in higher education.
- Demonstrated experience in curriculum review, curriculum development, accreditation, or quality assurance processes in higher education.
- Strong understanding of competency-based curriculum frameworks.
- Demonstrated knowledge of labour market trends within the geoscience, mining, petroleum, environmental, and mineral sectors.
- Familiarity with Uganda's higher education regulatory frameworks and quality assurance requirements.
- Experience participating in curriculum accreditation or programme review exercises and **International experience** are added advantage.

c) Competencies

- Excellent analytical and technical writing skills.
- Strong stakeholder engagement and facilitation skills.
- Ability to work collaboratively with multidisciplinary teams.
- Strong communication and presentation skills.
- Demonstrated commitment to quality assurance and academic excellence.

Note:

- **A Successful consultant should have been active in geoscience education and research in an accredited academic institution for at least 3 of the last five years.**

Application Requirements

Interested consultants should submit:

1. Technical Proposal detailing understanding of the assignment, methodology, and approach.
2. Financial Proposal indicating professional fees and any associated costs.
3. Detailed Curriculum Vitae highlighting relevant qualifications and experience.
4. Copies of academic certificates and professional qualifications.
5. Evidence of similar assignments successfully completed.
6. Contact details of at least three professional referees.

Evaluation Criteria

Applications shall be evaluated using the following criteria:

Technical Evaluation (80%)

- Relevant academic qualifications – 20%
- Experience in curriculum development/review – 25%
- Experience in geoscience education and training – 20%
- Understanding of the assignment and methodology – 15%

Financial Evaluation (20%)

- Cost competitiveness and value for money – 20%

Only applicants who attain the minimum technical score specified by the evaluation committee shall proceed to financial evaluation.

Ethical Considerations

The consultant shall maintain confidentiality of all project information, documents, stakeholder inputs, and curriculum materials obtained during the assignment.

Application Submission

Interested and eligible consultants are invited to submit their applications electronically or physically in sealed envelopes clearly marked:

“Consultancy for Geoscience Curriculum Review and Development Expert – MAK-SDMU Project”

Applications should be addressed to:



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The Project Coordinator

MAK-SDMU

Department of Geology and Petroleum Studies

Makerere University

P.O. Box 7062, Kampala, Uganda

Email: denis.mutebi@mak.ac.ug and copy to denis2003mutebi@gmail.com and arthur.batte@mak.ac.ug

Extended deadline for Submission: Tuesday, June 30 2026 at 4:00 pm (EAT)

Only shortlisted candidates will be contacted.

Equal Opportunity Statement

Makerere University is an equal opportunity institution and encourages applications from qualified individuals regardless of nationality, gender, disability, or background.

Female Candidates are encouraged to apply.

Disclaimer

Makerere University reserves the right to accept or reject any application and is not bound to award the consultancy to the lowest-priced bidder. Only shortlisted applicants will be contacted.