

## Syllabus

### Module 1: Challenges and opportunities

- 1.0 Introduction to the course
- 1.1 Short history of oil, gas, and mining
- 1.2 Challenges and opportunities of oil, gas, and mining
- 1.3 The decision chain of natural resource management (I)
- 1.4 The decision chain of natural resource management (II)

### Module 2: Political economy of natural resources

- 2.0 Introduction to Module 2
- 2.1 How natural resources shape and are shaped by political context
- 2.2 Corruption trends in the extractive sector
- 2.3 International governance initiatives
- 2.4 Natural resources and the broader governance framework
- 2.5 Transparency and accountability
- 2.6 (Optional) Towards evidence driven policy reform using the Resource Governance Index

### Module 3: Fundamentals of oil, gas, and mining: industry considerations and policy implications

- 3.0 Introduction to Module 3
- 3.1 From oil well to car - market, players, and extraction process in oil
- 3.2 From mine to mobile phone - market, players, and extraction process in mining
- 3.3 How a company decides to invest in a project
- 3.4 The project development process
- 3.5 Evolving technology
- 3.6 (Optional) Fundamentals of energy and petroleum

### Module 4: Legal overview

- 4.0 Introduction to Module 4
- 4.1 Legal and regulatory frameworks for extractive industries
- 4.2 Allocation of rights
- 4.3 Implementation and monitoring of legal frameworks
- 4.4 International law and the extractive industries
- 4.5 State-owned enterprises: Role and governance
- 4.6 (Optional) Regional harmonization: Case studies from Africa

### Module 5: Fiscal regime design and revenue collection

- 5.0 Introduction to Module 5

- 5.1 Resource economics and fiscal regime principles
- 5.2 Fiscal instruments I: Royalty/tax systems
- 5.3 Fiscal instruments II: Contract-based systems
- 5.4 Fiscal regime implementation

#### Module 6: Anticipating and managing environmental issues

- 6.0 Introduction to Module 6
- 6.1 Environmental challenges and trends: oil and gas
- 6.2 Environmental challenges and trends: mining
- 6.3 Managing environmental challenges
- 6.4 Extractives and climate change
- 6.5 Environmental impact assessments and environmental due diligence

#### Module 7: Community rights

- 7.0 Introduction to Module 7
- 7.1 Social impact and engagement
- 7.2 Human rights and the global mining industry
- 7.3 Mining and vulnerable populations
- 7.4 Company-community agreements

#### Module 8: Artisanal mining

- 8.0 Introduction to Module 8
- 8.1 Introduction to artisanal and small-scale mining (ASM)
- 8.2 Challenges of ASM
- 8.3 ASM and gender
- 8.4 Tensions between artisanal and large-scale mining
- 8.5 Key opportunities and the way forward

#### Module 9: Revenue management

- 9.0 Introduction to Module 9
- 9.1 Challenges of revenue management
- 9.2 Policy responses: savings, spending, public debt, and earmarking
- 9.3 Natural resource funds
- 9.4 Revenue sharing and decentralization

#### Module 10: Investing in sustainable development: Economic linkages to the extractives sector

- 10.0 Introduction to Module 10
- 10.1 Introduction to economic linkages

- 10.2 Local employment
- 10.3 Local procurement
- 10.4 Enabling technology transfer
- 10.5 Downstream linkages

#### Module 11: Investing in sustainable development: Looking beyond extractives

- 11.0 Introduction to Module 11
- 11.1 Investing in investing
- 11.2 Leveraging extractive industries for infrastructure
- 11.3 Resource-for-infrastructure deals
- 11.4 (Optional) Integrated spatial planning

#### Module 12: Cross-cutting considerations and looking ahead

- 12.0 Introduction to Module 12
- 12.1 Political tripod and authorizing environment
- 12.2 Engaging citizens
- 12.3 Aligning extractive industries with the Sustainable Development Goals
- 12.4 Course wrap-up