MAGNA SKILLS DEVELOPMENT INSTITUTE

Capacity Building • Professional Training • Organisational Development

Generated: 19-Nov-2026

Course Profile Document

Oil and Gas Energy

Field Development Planning

Prepared as a professional course profile for delegate review, sponsorship approval and organisational training planning.

COURSE CODE	DELIVERY	DURATION	PREPARED FOR
MSD2699	**Online / Face-to-Face**	**Flexible**	**Organisation Approval**

Register for this Course

View Online Course Page

Course Overview

Magna Skills presents the Field Development Planning course, designed to provide professionals in the oil and gas industry with comprehensive training on the principles, methodologies, and best practices for planning and executing field development projects. This course covers essential aspects such as reservoir characterization, production optimization, facilities design, project economics, and risk management, equipping participants with the knowledge and skills needed to successfully plan and execute field development projects.

Course Outcomes

Upon completion of the course, participants will:

1. **Understand Reservoir Characterization:**
   - Gain insights into reservoir geology, fluid properties, and reservoir modeling techniques.
   - Learn how to characterize reservoirs to optimize hydrocarbon recovery.
2. **Develop Field Development Strategies:**
   - Learn methodologies for field development planning and optimization.
   - Understand the factors influencing field development strategies and decision-making.
3.

Optimize Production and Recovery:

- Develop strategies for maximizing production rates and ultimate hydrocarbon recovery.
- Understand the importance of reservoir management and production optimization techniques.

4. **Design Surface Facilities:**
   - Learn the principles of surface facilities design and optimization.
   - Understand the integration of surface facilities with reservoir and production systems.
5. **Evaluate Project Economics:**
   - Conduct economic evaluations and feasibility studies for field development projects.
   - Analyze project economics, including costs, revenues, and return on investment.
6. **Manage Risks and Uncertainties:**
   - Identify and assess risks and uncertainties associated with field development projects.
   - Develop risk management strategies to mitigate project risks and optimize project outcomes.

Course Outline / Curriculum

Module 1: Reservoir Characterization and Modeling

- Reservoir geology and fluid properties
- Reservoir modeling techniques and uncertainty analysis

Module 2: Field Development Planning Methodologies

- Field development strategies and decision-making frameworks
- Integrated field development planning processes

Module 3: Production Optimization Techniques

- Reservoir management strategies for production optimization
- Artificial lift methods and production enhancement techniques

Module 4: Surface Facilities Design

- Principles of surface facilities design and optimization
- Integration of surface facilities with reservoir and production systems

Module 5: Project Economics and Feasibility Studies

- Economic evaluation techniques for field development projects
- Feasibility studies, cost estimation, and financial modeling

Module 6: Risk Management in Field Development

- Identifying and assessing risks and uncertainties
- Risk management strategies and contingency planning

Module 7: Regulatory Compliance and Environmental Considerations

- Regulatory requirements for field development projects
- Environmental impact assessments and mitigation measures

Module 8: Case Studies and Practical Applications

- Analysis of real-world field development projects
- Application of field development planning techniques in practice

Module 9: Emerging Trends and Technologies - Emerging trends and technologies in field development planning - Adoption of digital tools and data analytics in field development

Module 10: Project Management and Execution - Project management principles for field development projects - Execution strategies and project implementation best practices

The Field Development Planning course is suitable for professionals working in the oil and gas industry, including reservoir engineers, production engineers, project managers, and field development specialists. Through a combination of theoretical learning, case studies, practical exercises, and interactive discussions, participants will gain the knowledge and skills needed to plan, optimize, and execute successful field development projects.

Target Audience

- Professionals with and interest in developing oil and gas projects
- Explorationists
- Geoscientists
- Reservoir engineers and Petroleum engineers
- Drilling and completion engineers
- Process, chemical and facilities engineers
- Commercial and finance professionals and managers
- Project managers

Key Course Benefits

Work-Ready Skills

Delegates leave with practical tools, templates and methods they can apply immediately at work.

Better Institutional Results

The programme supports stronger planning, reporting, compliance, accountability and service delivery.

Sponsor-Friendly

This document is designed to help supervisors, HR units and sponsors approve delegate participation quickly.

Professional Recognition

Delegates receive training documentation and a certificate of completion after successful participation.

Our Training Centres & Delivery Options

Magna Skills offers flexible delivery through face-to-face training centres across Africa and beyond, plus Online / E-Learning for delegates who prefer remote participation.

Southern Africa

Practical training destinations with strong travel access and delegate support.

- Pretoria, South Africa
- Vic Falls, Zimbabwe
- Livingstone, Zambia

East Africa

Popular regional centres for government, NGO and donor-funded project teams.

- Kigali, Rwanda
- Kampala, Uganda
- Nairobi,
- Zanzibar, Tanzania

West Africa & Islands

Strategic locations for regional networking and executive capacity building.

- Accra, Ghana
- Port Louis, Mauritius

International Executive Venue

Premium destination training for senior teams and international delegates.

- Dubai, United Arab Emirates

Online / E-Learning

Attend from anywhere through live online, blended or self-paced learning options.

- Online, E-Learning
- Remote Teams
- Flex

Organisation-Based Training

Magna Skills can also arrange dedicated in-house training for ministries, NGOs and companies.

- Onsite
- Custom Dates
- Group Training

Ready to Nominate Delegates?

Use the links below to register, review the live course page or contact Magna Skills for organisation-based training support.

Register / Apply Online | **View Full Course Page**

About Magna Skills

Magna Skills Development Institute provides practical capacity building programmes for government departments, NGOs, public institutions, donor-funded projects and private sector professionals across Africa. Our training approach combines expert facilitation, real workplace case studies, practical tools, post-training support and professional documentation that helps organisations strengthen staff performance and service delivery.

Government Training | NGO Capacity Building | Corporate Workshops | Online Learning | Face-to-Face Training | Certifica

Approval & Authorisation Form

This section may be completed by the organisation, department, HR office, finance office or sponsor approving delegate participation. It can be attached to an internal memo, procurement request or training approval submission.

Organisation / Department	
Delegate Name(s)	
Approved Course	Field Development Planning
Preferred Delivery Mode	☐ Online ☐ Face-to-Face ☐ Organisation-Based Training
Preferred Training Venue / Date	
Estimated Number of Delegates	
Budget / Vote Number	
Contact Person	
Email / Mobile	

Authorised Name _____ Signature / Stamp _____ Date _____