Course Type	Course Code	Name of Course	L	T	P	Credit
OE6	PEO405	Integrated Reservoir Management	3	0	0	9

Course Objective
The objective of the course is to provide the basic knowledge of reservoir management and integration of the well performance outcome.
Learning Outcomes
Exposure of the reservoir management concept, data acquisition, analysis and management practices. Ability of analyses to the reservoir performance and prediction of future response.

Unit No.	Topics to be Covered	Lecture Hours	Learning Outcome
1	**Introduction**: Scope and Objectives	5	Proper understanding of Reservoir management integration.
2	**Reservoir management concepts**: Definition and history, fundamentals of reservoir management, synergy and team; integration of geosciences and engineering, integration of exploration and development technology	5	Basic concept of Reservoir management synergy and integration.
3	**Reservoir management process**: Setting goals, developing plans and economics, surveillance and monitoring, evaluation	6	Ability to sequential process of Reservoir management and conceptual monitoring.
4	**Data acquisition, analysis and management:** Classification of data, acquisition, analysis and application, validation, storing and retrieval	5	Data management and handling ability
5	**Reservoir model**: Role of reservoir model in reservoir management, integration of G & G and reservoir model	5	Ability for analysis of reservoir data and development of Reservoir model
6	**Reservoir performance analysis and prediction**: Naturally producing mechanism, reserves and role of various forecasting tools- volumetric method, MBE, Decline curve and mathematical simulation	6	Analytical capability of Reservoir performance and forecasting of future behavior regarding productivity.
7	**Matured field reservoir Management**.	5	Utilization of Mature field for total field performance.
8	**Reservoir Management economics**: evaluation, risk and uncertainties	5	Proficiency of Reservoir economical management and risk management
	Total contact hours:	42	

Text Books:

1. Hydrocarbon Reservoir and Well Performance - T.E.W. Nind

References:

1. Advanced Reservoir Engineering - Tarek Ahmed & Paul D. McKinney
2. Petroleum Production Systems - Michael J Economides
3. Petroleum Production Engineering", Gulf Professional Publishing, ISBN 10: 0750682701/ ISBN 13: 9780750682701(2007): Boyun Guo, William C. Lyons, and Ali Ghalambor.