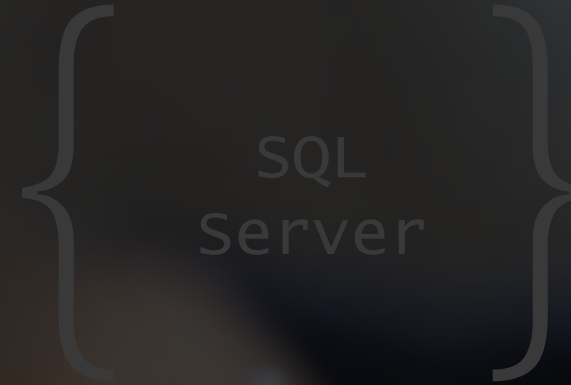




WorkshopPLUS – SQL Server: Performance Tuning and Optimization

Raymond James
May 1st – 4th, 2023
9:00 am – 5:00 pm ET





John Deardurff

Cloud Solution Architect (Data & AI)

Microsoft Certified Trainer (Regional Lead)

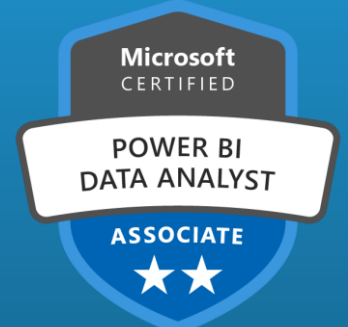
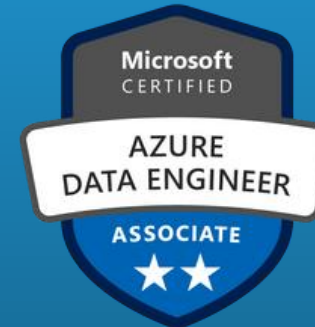
MVP: Data Platform (2016 – 2018)

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Facilities

Class hours

Building
hours

Parking

Restrooms

Meals

Phones

Smoking

Recycling

Agenda Day 1

Module 1: SQL Server Architecture, Scheduling and Waits

SQL OS

Task Scheduling

Waits and Queues



Module 2: SQL Server I/O and Database Structure

Disk I/O

Log File Structure



Agenda Day 2

Module 4: SQL Server Concurrency and Transactions

SQL Server
Transactions

Transaction
Isolation Level

SQL Server
Concurrency and
Transactions

SQL Server
Locking

Blocking and
Deadlocking



Module 5: SQL Server Index Structure

Index Internals

Indexing Strategies



Agenda Day 3

Module 5: SQL Server Index Structure

Index Monitoring

Partitioned Tables and
Indexes

Columnstore Indexes

In-Memory Tables



Module 6: SQL Server Statistics Structure

SQL Server Statistics Internals

SQL Server Statistics Maintenance



Agenda Day 4

Module 7: SQL Server Query Execution and Plans

SQL Server Query Execution

SQL Server Query Plan Analysis

Intelligent Query Processing



Module 8: SQL Server Plan Caching and Query Store

SQL Server Plan Cache
Internals

Query Store

Query Store Troubleshooting

Additional Review

Module 9: SQL Server Query Tuning



Sargable expressions



Query Hints



Query Troubleshooting

Module 10: SQL Server Performance Tools



Extended Events



Resource Governor



Dankie Faleminderit **Shukran** Chnorakaloutioun Hvala Blagodaria

Děkuji **Tak** Dank u Tānan Kiitos **Merci** Danke Ευχαριστώ A dank

Mahalo מודה. **Dhanyavād** Köszönöm Takk Terima kasih **Grazie** Grazzi

Thank you!

감사합니다 Paldies Choukrane Ačiū **Благодарам** ありがとうございます

谢谢 Баярлалаа **Dziękuję** Obrigado Mulțumesc **Спасибо** Ngiyabonga

Ďakujem Tack Nandri Kop khun **Teşekkür ederim** Дякую Хвала Diolch

