



**OMS eLearning Academy**  
For Refinery Offsite Operations Professionals

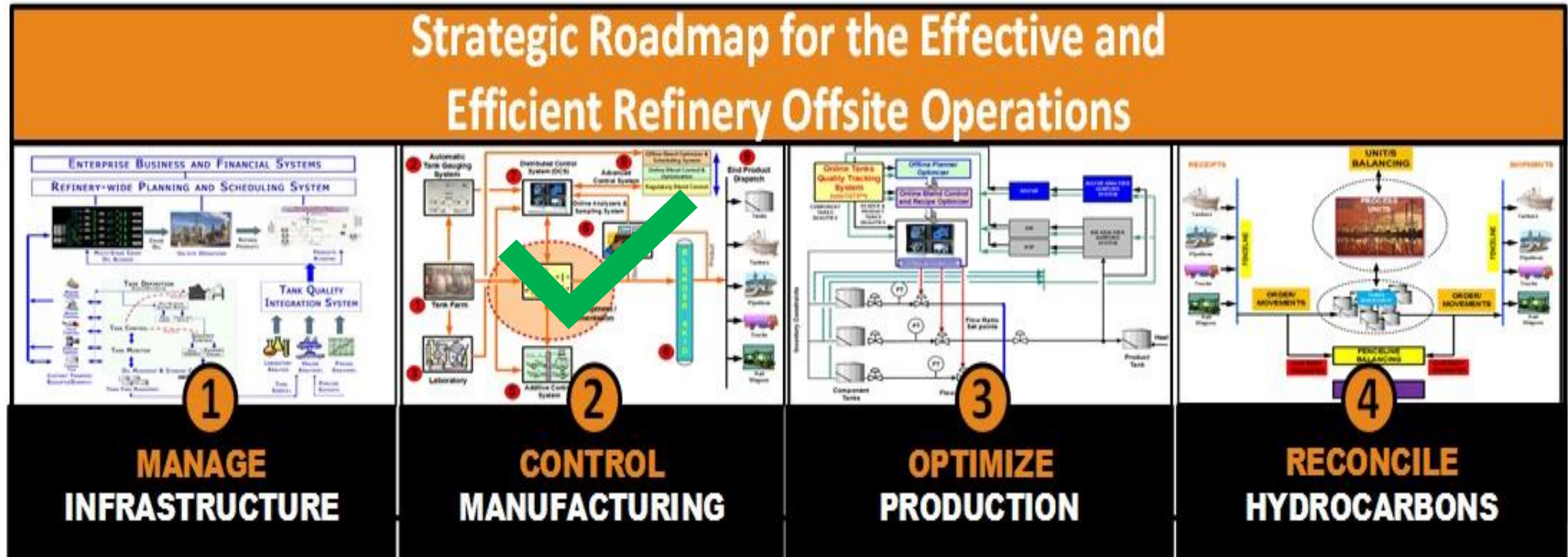


# Effective Control and Profitable Manufacturing of Refinery Products

*3 Days Public Course, March 12-14, 2024, Dubai, UAE*



# Strategic MCOR Courses for the Profitable Refining Operations

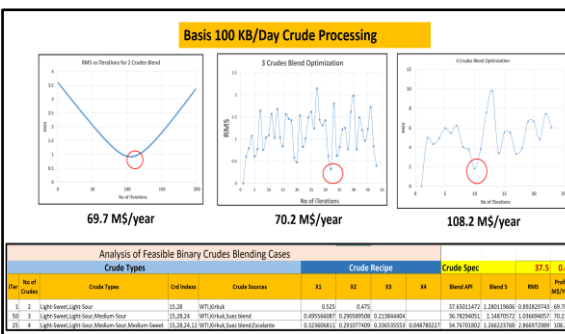
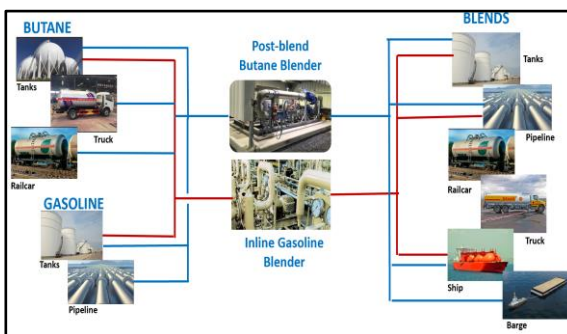
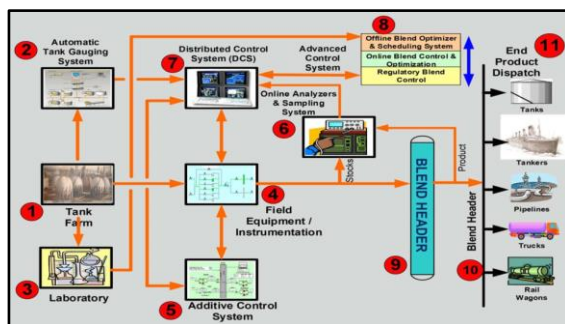
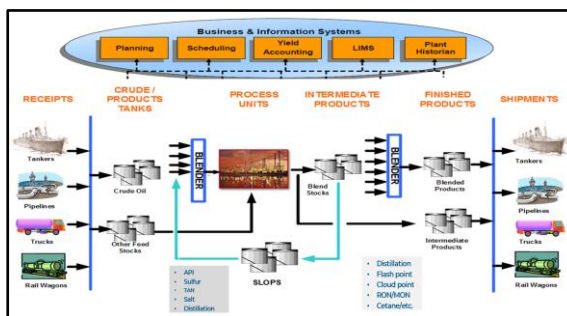
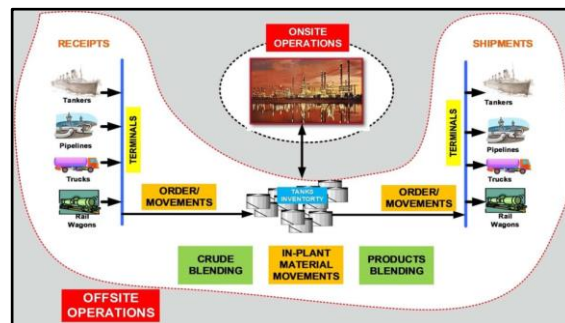


Webinar-2-MCOR Strategy to Manage Refinery offsite Operations





# Effective Control and Profitable Manufacturing of Refinery Products



- A crude oil refinery makes 80-90% of its products by blending systems in the offsite operations area.
- The inefficient blending control and optimization of crude oil blending, fuels blending, LPG blending and ethanol blending can affect the refinery's low 5% or less profit margin drastically.
- This three days F2F public course will discuss all aspects of management, automation, control and optimization of manufacturing all final refinery products.



# Our Organizations



## Offsite Management Systems LLC

- Founded in 1988 in Houston, Texas, USA
- Founder and CEO – Dr. Suresh S. Agrawal
- **Business Charter** – To provide consulting and project management services to downstream refineries and related businesses worldwide



## OMS eLearning Academy

- Founded in 2018 in Houston, Texas, USA
- Academy Director– Dr. Suresh S. Agrawal
- **Business Charter** – To provide online courses for the professionals at all skills levels in the downstream refining operations and related businesses



# Webinar Speaker

6



- Our Course Director, **Dr. Suresh S. Agrawal**, is [Offsite Management Systems LLC \(OMS\)](#), Houston, Texas, USA.
- He graduated from the Indian Institute of Technology, Mumbai, India, with a Bachelor of Chemical Engineering. He then obtained a Master's and PH.D. Degrees in Chemical Engineering from Illinois Institute of Technology, Chicago, USA.
- Dr. Agrawal has 40+ years of experience at senior technical / management positions with international companies, and he has successfully managed many advanced refinery process control projects in numerous countries.
- He has published and presented 30+ papers in international publications and conferences in the areas of advanced process control.
- He has also acted as a consultant to several refining and process industries worldwide and delivers training seminars in the areas of his expertise.
- He was also co-editor and sole author of two chapters in the 800+pages ASTM manual [“MNL58 - Petroleum Refining and Natural Gas Processing.”](#) published in 2013.

MCOR-02 Control of Manufacturing



## Course Details

Information	Details
Start Date / Time	March 12, 2023 8 AM
End Date / Time	March 14, 2023 5 PM
Registration and Welcome	March 12, 2023 7 AM
Registrations Limit	25 (Subject to Revise)
City, State, Country	Dubai, UAE
Venue	To Be Announced

[View Course Topic Catalog](#)

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# Course Fee and Discounts

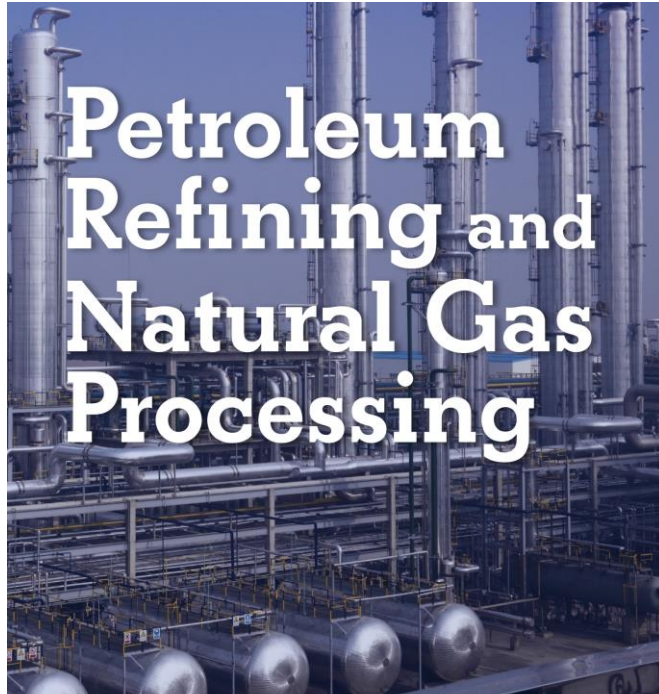
Information	Details
Course Fee	USD 2,499 / Person
Registration and Payment Deadline	February 15, 2024
Early-Bird Discount	USD 100/Person
Early-Bird Deadline	January 15, 2024
Ground Discount	USD 125 / Person for 5+ Registrations from the same company
Group Discount Deadline	January 15, 2024

[REGISTER NOW](#)[PAY NOW](#)





# What will the Course Fee include?



M.R. Riazi, S. Eser, S.S. Agrawal, J.L. Peña Díez, editors



**REGISTER NOW**

- Printed copy of the course material – 4 Slides / Page in double-side format
- Notebook / Pen for the Class Notes
- Water Bottle
- Corporate Gift
- Morning / Afternoon Snacks and Drinks
- Buffet Lunch
- 2<sup>nd</sup> day Dinner with the Course Director
- **Chance to win a printed copy of the ASTM Manual-58 (Edited and Co-Authored by the course Director)**
- **One-month free access to OMS eLearning Academy of 200+ Topics/Courses**

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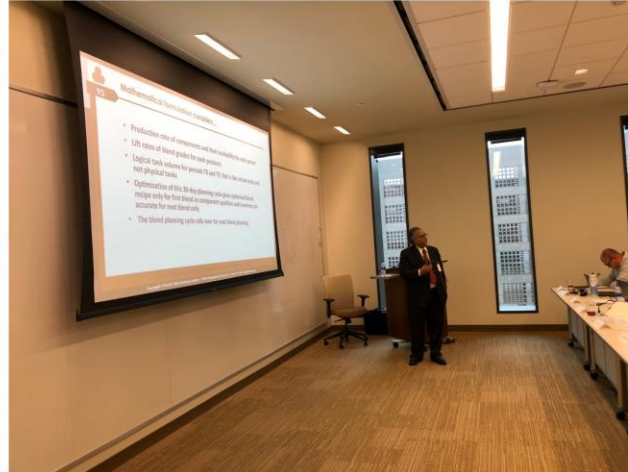


# Recommended Professionals to Attend the Course

- This course is very comprehensive in nature and cover 50-60 topics of 25-30 minutes each.
- Each topic is carefully selected for all the course to cover management, automation, control, and optimization of refinery offsite operations, which produce 80-90% of refinery products.
- It is almost pertinent that refinery professionals are trained adequately and continue to perform their job functions.
  - ✓ **Management** – Refinery Manager, OM&S Manager, Blending Manager, Control System Manager, and IT Manager
  - ✓ **Planning and Scheduling** – Refinery Planner, Refinery Scheduler, and Blending scheduler
  - ✓ **Engineering** – Process Engineer, Blending Engineer, Control System Engineer, IT/Engineers/Analyst, and Analyzer Engineer
  - ✓ **Operations** – Offsite operators, Blending Operators, Field Operators, Maintenance Staff.
  - ✓ **Financial** – Finance Manager, Yield Accountant, Finance Analyst



# One-Day Course Conducted at Phillips66, Houston Corporate



- One Day Course on Advanced Fuel Blend Control and Optimization
- Attended by 45 professionals from 13 Phillips66 refineries
- Attendees belonged to different departments and receptibilities





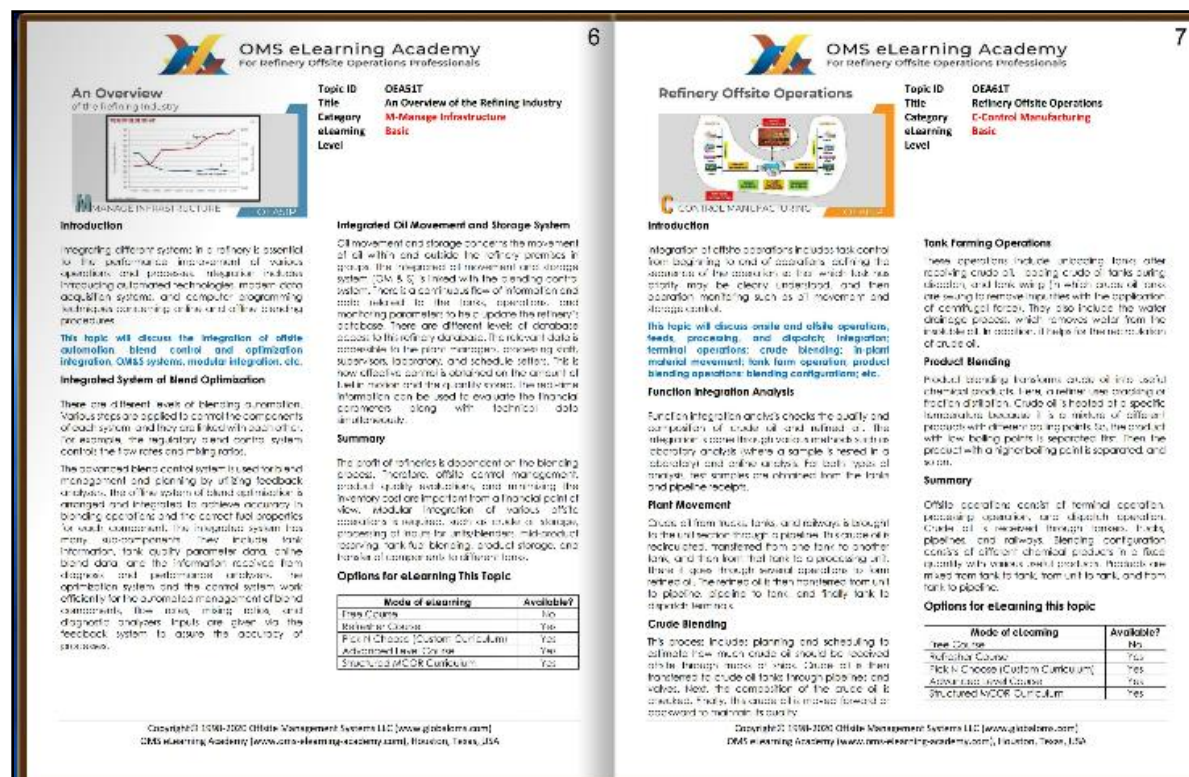
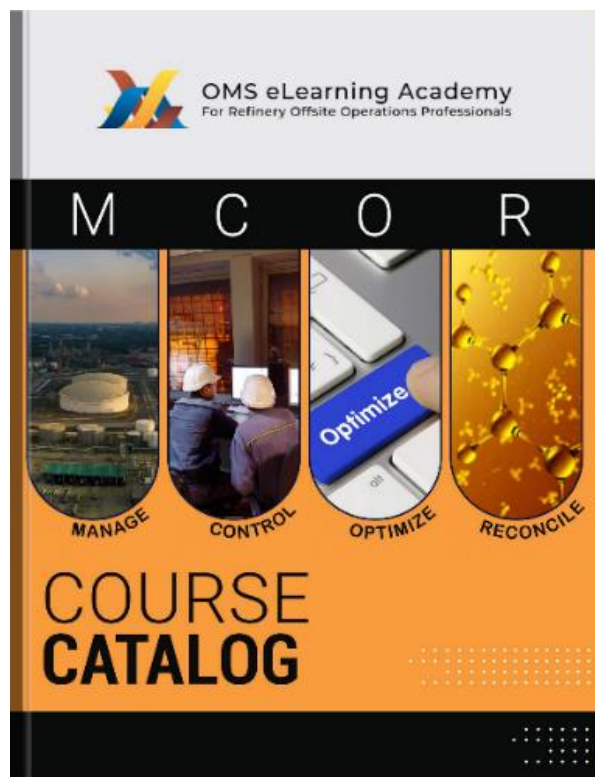
# Three-Days Private Course Conducted at Cartagena, Ecopetrol Refinery



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# Course eBook of all Topics



To view the preliminary course contents for each topic, please below.  
The course contents may be revised/enhanced to create a maximum learning experience.  
Your suggestion for changes or additions to content is welcome before February 1, 2024.

[View Course Topics Catalog](#)

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# Day-1 Automation and Management of Infrastructure

## Module-1 Overview and Fundamentals

- 1 An Overview of the Refining Industry
- 2 Refinery Offsite Operations
- 3 The Roadmap to MCOR of Refinery Offsite Operations
- 4 Fuel Blending Operations in a Refinery
- 5 Problems and Challenges of Blending Operations

## Module-2 Automation of Infrastructure

- 6 Tank Farm Management
- 7 Tank Gauging System
- 8 Terminal Operations
- 9 Tank Inventory Management System
- 10 The Management and Automation of OM&S in a Refinery

## Module-3 Qualities Analysis and Measurements

- 11 Quality Relationships, Analysis, Measurements, and Control
- 12 Lab Analysis of Stock and Product Qualities
- 13 Online Analysis of Stock and Header Qualities
- 14 Model-Based Predictions of Tank Qualities
- 15 The Mysteries of Octane

## Module-4 Crude Blending

- 16 Crude Blending-Part I Concept And Economics
- 17 Crude Blending Optimizer
- 18 Crude Blending Part-II Analyzers and Controls
- 19 Crude Tanks Composition Tracking
- 20 Gasoline, Diesel, and Fuel Oil Specifications
- Reviews, Discussion, Questions and Answers

[View Course Topics Datasheets](#)

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# Day-2 Products Manufacturing Control and Optimization

## Module-5 Fuel Blending

- |    |                                       |
|----|---------------------------------------|
| 20 | Optimum Blend Control System Strategy |
| 21 | Blender Configurations                |
| 22 | Field Equipment and Instrumentation   |
| 23 | Additives Control and Monitoring      |
| 24 | Blend Header Design Considerations    |

## Module-6 Linear and Non-Linear Blend Models

- |    |   |
|----|---|
| 25 | Blending Definition and Formulation       |
| 26 | Linear and Nonlinear Blend Models         |
| 27 | Methods to Handle blend model errors      |
| 28 | Control Matrix of Qualities               |
| 29 | The Journey of Octane Thru Refinery Lanes |

## Module-7 Offline Blend Optimization and Planning

- |    |  |
|----|--|
| 30 | Refinery-Wide Planning and Scheduling                      |
| 31 | Offline Blend Planning and Optimization                    |
| 32 | Demonstration of an Offline Blend Optimizer System         |
| 33 | The Quality Giveaway-Concept, Cost, and Reduction Benefits |
| 34 | Lab Exercise to Solve an LP Problem of a Small Refinery    |

## Module-8 Regulatory Blend Control

- |    |  |
|----|--|
| 35 | Regulatory Blend Control                   |
| 36 | Blend Trim Control                         |
| 37 | Diesel Blending                            |
| 38 | Ethanol Blending                           |
| 39 | LPG Blending                               |
|    | Reviews, Discussion, Questions and Answers |

[View Course Topics Datasheets](#)

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# Day-3 Projects Justification and the Implementation

## Module-9 Online Blend Control and Optimization

- |    |   |
|----|---|
| 39 | Mathematics of offline versus online blend Optimization |
| 40 | Advanced Online Blend Control and Optimization          |
| 41 | Control and Optimization of a Rundown Blending System   |
| 42 | Data Reconciliation and Feedback                        |
| 43 | Regression and Feedback of Blend Model Parameters       |

## Module-10 Estimation of Tangible Benefits

- |    |   |
|----|---|
| 44 | How to Benchmark the State of a Refinery Fuel Blending System |
| 45 | Tangible Benefits of Refinery Offsite Operations              |
| 46 | Where and How to Start  |
| 47 | Identification of Automation Areas                            |
| 48 | Required Blending Data for Control and Optimization           |

## Module-11 Blending Project Implementation

- |    |   |
|----|---|
| 49 | How to Implement a Blending Control and Optimization Project      |
| 50 | How to Implement an Oil Movement and Control Project              |
| 51 | Collaboration of Data and Process for Refinery Offsite Operations |
| 52 | How to Realize and Sustain Benefits                               |
| 53 | Why Blending Projects Fail  |

## Module-12 Success Factors for a Profitable Refinery

- |    |   |
|----|---|
| 54 | Required Enterprise Changes to Implement Blending Projects  |
| 55 | Continuing Education in the downstream Refining   |
| 56 | About OMS eLearning Academy Portal  |
| 57 | A Treatise of ASTM Standards<br>Reviews, Discussion, Questions and Answers<br>Certificate award and ASTM Manual winner draw |

[View Course Topics Datasheets](#)

MCOR-02 Control of Manufacturing



# Past Courses conducted as Public / Private / in-house



Companies who participated in the Course  
taught by the Course Director

**REGISTER NOW**

- **Public Courses**

- ✓ Singapore
- ✓ Prague, Czech Republic
- ✓ Bangkok, Thailand
- ✓ Orlando, Florida
- ✓ Houston, USA

- **Private Courses**

- ✓ Phillips 66, Houston
- ✓ IST Corporation, Bogota, Columbia
- ✓ Ecopetrol, Cartagena refinery
- ✓ HPCL Refinery, Vishakhapatnam
- ✓ Pemex Refinery, Mexico

- **In-House Courses**

- ✓ 3X Corporation, New Jersey
- ✓ ABB, Inc, Houston
- ✓ Exxon Mobile, Rotterdam, The Netherlands
- ✓ CEPSA Refinery





# Few Testimonials from the Past Attendees



1. *Five stars to the course and the instructor.*
2. *Upon completion of the course, I felt good to have learned what is offsite operations about as in our refinery this area of operations is not focused enough even though it affects the bottom-line. Great course, indeed. – Smith Edward ,...*
3. *My favorite topics were the “journey of octane thru refinery lanes” and fuels blending. The lab exercise to solve a small refinery problem was excellent to demonstrate the use of LP. I wish the course would have more lab exercises of the kind.*
4. *I was transferred to offsite operations from onsite and I had very little clue about offsite as such. This course gave me an excellent overview of technology and operational aspects with right blend of details. I would recommend this training course to...*
5. *The discussion of our refinery fuels blending problem at the end was very helpful to us and gave us directions to move towards. Thank you very much, Dr. Agrawal.*



# Few Testimonials from the Past Attendees



**READ MORE  
TESTIMONIALS**

6. *The discussion of our refinery fuels blending problem at the end was very helpful to us and gave us directions to move towards. Thank you very much, Dr. Agrawal.*
7. *The instructor is extremely knowledgeable and very interactive with the class participants.*
8. *The course was very interesting as I could relate the refining and auto industry problems and challenges in terms of fuel quality specifications and ways to meet them economically.*
9. *The concept of Blender header design was very innovative as it was developed and taught by the instructor. It took the notion out that blend header is just a piece of pipe. It has many design considerations, important to success of blending system, thank...*
10. *I have not attended any training course before which is so methodical, exceptional, rich in topics and presented excellently. I learned a lot about fuels blending in this course, thanks to the instructor.*



# Cancellation & Refunds

20



- **Can't make your scheduled course?**

If you cannot attend your registered course, send a request for a substitute course schedule in the future.

Contact [Info-oea@globaloms.com](mailto:Info-oea@globaloms.com) to transfer and be aware that transfers are subject to space allocation. There is no additional charge for transferring to a different course in the future. However, cancellation on or after the first day of a course is subject to the full course fee. Please see our refund policy below for more details.



- **Refund Policy**

OMS will provide a refund per the following schedule of cancellation requests before the start of the event:

- More than 21 days – 100 % refund
- Between 14 to 21 days – 75% refund
- Between 7 to 14 days – 50% refund
- Before seven days – No refund



# Course Policies



- **Travel**

OMS is not responsible in any way for the purchase of non-refundable airline tickets or the cancellation/change fees associated with canceling a flight. OMS encourages attendees to call and confirm whether a specific course is running before purchasing airline tickets. OMS retains the right to cancel a course until three weeks before the scheduled presentation date.

- **Dress**

Casual business attire

- **Personal Property**

Attendees are responsible for all personal belongings during the course length while in the hotel and other meeting spaces; this includes all breaks, lunches, and overnight accommodations. OMS does not assume responsibility for any missing or damaged articles.

Additional information Statements made by instructors do not represent the position of OMS. No audio recording or videotaping is permitted. OMS reserves the right to substitute an instructor(s). Course prices are subject to change without notice.





# Register Now and Pay Later to Save Your Seat

**Event Date – March 12-14, 2025. Three Full Days, Dubai, UAE.**

**Venue will be announced after the course schedule is confirmed based on threshold number of registrations.**

Action	Deadline	LinkedIn	OMS Academy
Registration	February 15, 2024		<a href="https://www.oms-elearning-academy.com/public-registration/?CourseID=OEA1302P">https://www.oms-elearning-academy.com/public-registration/?CourseID=OEA1302P</a>
Payment	February 15, 2024	Not Applicable	<a href="https://www.oms-elearning-academy.com/product/oea1302p-technology-and-management-of-fuel-blending-control-and-optimization-system/">https://www.oms-elearning-academy.com/product/oea1302p-technology-and-management-of-fuel-blending-control-and-optimization-system/</a>
Early-Bird & Group Discount	January 15, 2024	\$100 / Person for Early-Bird \$125 / Person for Group of 5+	

**REGISTER NOW**

**PAY NOW**

MCOR-02 Control of Manufacturing



23

# Ways to Register and Pay for the Course

**A 3-DAYS EXCLUSIVE PUBLIC COURSE TO HELP YOU ENHANCE YOUR SKILLS**

**TOPIC**

## Effective Control And Profitable Manufacturing of Refinery Products

This three days course will cover all technical, operational, modeling, and economical aspects of control of manufacturing of refinery products.

**COURSE DIRECTOR**



**DR. SURESH AGRAWAL**  
Founder & CEO  
Offsite Management Systems LLC  
(www.globaloms.com)

**Academy Director**  
OMS eLearning Academy  
(www.oms-elearning-academy.com)

**Daily 8 AM - 5 PM (GST)**  
**12-14 March, 2024**  
**Dubai, UAE**

**\$2,499 / Person** Pay By 15 January, 2024, And Get An Early-Bird Discount

**THE COURSE IS LIMITED TO 25-35 ATTENDEES ONLY FOR EFFECTIVE INTERACTION**

**OMS eLearning Academy**  
For Refinery Offsite Operations Professionals



WWW.OMS-ELEARNING-ACADEMY.COM

REGISTER ON LINKEDIN

**A 3-DAY EXCLUSIVE PUBLIC COURSE TO HELP YOU GROW YOUR SKILLS & BUSINESS**

**TOPIC**

## Management & Technology of Advanced Fuel Blending Control & Optimization System

The course will cover all technical, operational, modeling, and economical aspects of fuel blending control and optimization systems.

**COURSE DIRECTOR**



**DR. SURESH AGRAWAL**  
Founder & CEO  
Offsite Management Systems LLC  
(www.globaloms.com)

**Academy Director**  
OMS eLearning Academy  
(www.oms-elearning-academy.com)

**DETAILS**

Location: Houston, Texas  
Date: 20-22 June, 2023  
Time: Daily 8 AM - 5 PM (CST)  
Pay By 23 May, 2023  
Early Bird & Group Discounts Available

**THE COURSE IS LIMITED TO 25 ATTENDEES ONLY FOR GREATER INTERACTION**

The Public Course Starts In:

**90** Days **18** Hrs **53** Min **27** Sec

**REGISTER NOW!**

NO THANKS, I WILL PASS!

Click on the register button on the popup on our Academy Home Page. It will redirect to LinkedIn page.

**OMS Academy Public Course Series**  
**Effective Control and Profitable Manufacturing of Refinery Products**  
**Three Days Public Course**



**Course Director**  
**Dr. Suresh Agrawal**  
Founder and CEO  
Offsite Management Systems LLC  
(www.globaloms.com)

**Academy Director**  
OMS eLearning Academy  
(www.oms-elearning-academy.com)

**Register Now:**  
Pay By Feb 15, 2024  
Early Bird Discount: 10%  
Link to Register: <https://link.to/register>

**March 12-14, 2024**  
Dubai, United Arab Emirates  
Daily 8 AM - 5 PM (GST)

**OEA1302C-Effective Control and Profitable Manufacturing of Refinery Products**

A typical crude oil refinery makes 80-90% of its products by blending systems in the offsite operations area. This three days public workshop will discuss how the inefficient blending control and optimization of crude oil blending, fuels blending, LPG blending and ethanol blending can improve the refinery's low 5% or less profit margin significantly.

**Start: 3/12/2024 8 AM**  
**End: 3/14/2024 8 AM**  
**Price: \$2499/Person**  
**Location: Dubai, UAE**

**Details** **Register** **Pay Now**

REGISTER ON ACADEMY

PAY ON ACADEMY

MCOR-02 Control of Manufacturing



# Choice of Course – Public F2F vs eLearning

You can choose enrolling for public course or eLearning on the Academy Portal

OMS Academy Public Course Series  
**Effective Control and Profitable Manufacturing of Refinery Products**  
Three Days Public Course

Course Director  
Dr. Suresh S Agrawal  
Founder and CEO  
Offsite Management Systems LLC  
www.globaloms.com

Academy Director  
OMS eLearning Academy  
www.oms-elearning-academy.com

25 Engineers from Ecopetrol, Cartagena Refinery attended this private course in Cartagena, Colombia

Register Now,  
Pay By Feb 15, 2024  
Early Bird Discount  
Till Jan 15, 2024

**March 12-14, 2024**  
Tuesday to Thursday  
Dubai, United Arab Emirates  
Daily 8 AM-5 PM Local

Link to Register - <https://bit.ly/3U3pW6M>

www.oms-elearning-academy.com We learned then; We share now... www.globaloms.com

## OEA1302C-Effective Control and Profitable Manufacturing of Refinery Products

A typical crude oil refinery makes 80-90% of its products by blending systems in the offsite operations area. This three days public workshop will discuss how the inefficient blending control and optimization of crude oil blending, fuels blending, LPG blending and ethanol blending can improve the refinery's low 5% or less profit margin significantly.

Start: 3/12/2024 8 AM Price: \$2499/Person  
End: 3/14/2024 8 AM Location: Dubai, UAE

[Details](#)[Register](#)[Pay Now](#)

## Public Course

- **\$2 499 / Person**
- 3 days Duration
- Venue – Five Star Hotel
- F2F learning and live Interaction
- Printed Course Material
- Daily Meals / Gift /Dinner with Course Director

[REGISTER NOW](#)

## eLearning Course

- **\$769 / Person**
- 6 Months Duration
- eLearn anytime, anywhere, any device
- Audio-vide-subtitled Format
- No copy of course Material Provided

[ENROL NOW](#)

MCOR  
**CONTROL REFINERY MANUFACTURING**  
MCOR CORE COURSES  
OEA562P

OEA562P-MCOR-C-Control Refinery Manufacturing

This topic is a placeholder for a future topic. The topic will be in one of the categories of the MCOR, namely, Manage, Control, Optimize and Reconcile.

**\$769 | 54 Topics | 967 Slides**

**Dur 24 hrs | Exp 118 days**

★★★★★

[Reviews](#)

[Details](#) [Enroll](#)

MCOR-02 Control of Manufacturing



# Still Have Questions? Contact Us Here...



## Mailing Address

Offsite Management Systems LLC  
2003 Baker Estates Dr.  
Houston, Texas 77094, USA

Mode	Type	Details
Emails	Get Information	<a href="#">Information</a>
	Get Support	<a href="#">Support</a>
	Contact Director	<a href="#">Course Director</a>
Phone	Office	+1-832-821-8001
	Mobile	+1-281-650-3707
	Fax	+1-866-450-8035
Social Media	LinkedIn	<a href="https://linkedin.com/company/omsacademy">linkedin.com/company/omsacademy</a>
	Twitter	<a href="https://twitter.com/omsoeausa">twitter.com/omsoeausa</a>
	Facebook	<a href="https://facebook.com/omselearningacademy">facebook.com/omselearningacademy</a>
	Instagram	<a href="https://instagram.com/omselearningacademy/">instagram.com/omselearningacademy/</a>
	YouTube	<a href="https://youtube.com/@OMS-eLearning-Academy">youtube.com/@OMS-eLearning-Academy</a>





*Looking forward to seeing you at the event...*

