



MTU ValueCare

Training Program
Singapore, Asia



mtu ValueCare



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A customer-oriented technological leader.

MTU supplies its customers with technologically-advanced products that are proven in the field. MTU's range of products and services for off-highway applications is extensive and includes both standard and customized solutions.



1 Technological leader

As a supplier of high-quality performance drive solutions, MTU stands for the highest level of technological expertise.

2 Passion

MTU is passionate about fulfilling the needs of its customers with the utmost professionalism and precision.

3 Partnership

MTU is a reliable and trend-setting partner that acts with foresight in a results-oriented manner.

MTU is the core brand of Rolls-Royce Power Systems AG, which is a world-leading provider of high- and medium-speed diesel and gas engines, complete drive systems and distributed energy systems for the most demanding requirements.

The product range of MTU is one of the widest and most modern in the sector. We offer comprehensive, powerful and reliable engine solutions for yachts, commercial ships and naval vessels, construction and industrial vehicles, agricultural machinery, mining, rail and military vehicles as well as for the oil and gas industry. We also provide a full line of service products to help you maximize uptime and performance.

For over 100 years, MTU has been known for cutting-edge innovation and technological leadership. That same spirit of innovation inspires our sustainability efforts. Today and in the future, our focus is on developing and implementing system solutions to maximize efficiency and meet emissions standards.

An expert in technology

MTU has always set standards in technological expertise for customized product and system solutions. To deliver you maximum power density, we concentrate our innovation on the continuous advancement of our core competencies: turbo charging and electronics.

A passionate engine specialist

We spend every day working together with you, our customers, to deliver engines and systems that best fit your needs. Whether a standard system or a customized solution—we are passionate about the art of engine creation.

A reliable partner

We understand the specific demands for diverse applications. In collaboration with you, we look for the solutions which are best suited to your individual requirements. Every step of the way—from the start of project planning, during the design of your integrated system solution, at the point of delivery and commissioning and continuing through the care of your product—we are there with you for the entire lifecycle.

Training

Learn from the best.

Whether you're learning how to operate your MTU equipment effectively or developing your own onsite maintenance capabilities, only MTU has the experience and expertise to set you up for success.

Training is a great way to become proficient with MTU engines and systems and get maximum efficiency from your equipment. From preventive maintenance to diagnostics and repair, our training programs provide a hands-on learning experience with knowledgeable, expert trainers. We offer a wide range of customized training programs to maximize your return on investment.



1 MTU Customer Service Center in Singapore, Asia.

2 We conduct courses in our MTU Training Centers. Courses also may be held on-site at your facility.

Engine training courses

MTU offers a wide range of training courses, taught by experienced professionals who know MTU engines inside and out.

CM1

Target trainees
Operators

Prerequisites

- Technical understanding
- Knowledge of course language

Course objectives
The trainee learns:

- Engine design and function
- How to operate the engine and related systems
- How to identify and rectify minor faults
- How to perform preventive maintenance tasks per MTU Instructions

Curriculum

- Handling of documentation
- Design and function of the engine
- Explanation of oil and fuel, systems, etc.- Explanation of the fluids and lubricants specification
- Basic troubleshooting
- Preventive maintenance tasks QL1
- Introduction to the engine management system

Duration
See page 9

Schedule
To be agreed upon

No. of participants
Max. 8 persons

Location
MTU Training Center – Singapore

Course language
To be agreed upon

Training time
8:00 am to 4:00 pm

CM2

Target trainees
Maintenance staff

Prerequisites

- Good knowledge of diesel engine
- Knowledge of course language

Course objectives
The trainee learns:

- Engine design and function
- How to operate the engine and related systems
- How to identify and rectify minor faults
- How to perform corrective maintenance tasks per MTU Instructions
- How to exchange subassemblies

Curriculum

- Curriculum of course CM1
- Exchange of the subassemblies QL2

Duration
See page 9

Schedule
To be agreed upon

No. of participants
Max. 8 persons

Location
MTU Training Center – Singapore

Course language
To be agreed upon

Training time
8:00 am to 4:00 pm

CMO

Target trainees
Operators on site

Prerequisites

- Technical understanding
- A room for the theoretical training with
 - LCD projector (beamer)
 - White board or flip chart
- Availability of a training related engine
- Knowledge of course language

Course objectives
The trainee learns:

- How to operate the engine and related systems
- How to identify and rectify minor faults
- How to perform preventive maintenance tasks per MTU Instructions

Curriculum

- Handling of documentation
- Design and function of the engine
- Explanation of oil and fuel, systems, etc.
- Explanation of the fluids and lubricants specification
- Basic troubleshooting
- Introduction to the engine management system

Duration
To be agreed upon

Schedule
To be agreed upon

No. of participants
Max. 8 persons

Location
On-site at customer's location

Course language
To be agreed upon

Training time
8:30 am to 4:30 pm

Course Designations

4000 CM1/M

↑
Engine Series

↑
C = Customer

↑
M = Machinery/Engine Training Course

↑
CM1 = Course for Operator

↑
CM2 = Course for Maintainer

↑
CMO = On-Site Operator Training

↑
G = GenDrive

↑
M = Marine

↑
R = Railway

↑
C&I = Industrial

↑
P = Oil & Gas

↑
T = Oil & Gas, Frac

Duration of training courses

Series 60	Duration	Series 4000	Duration
CM2	3 days	CM1	3 days
		CM2	5 days
Series 183	Duration	Series 1600	Duration
CM2	5 days	CM1	2 days
		CM2	3 days
Series 500/900/460	Duration	Series 956/1163-03	Duration
CM2	3 days	CM1	4 days
		CM2	8 days
Series 1100/1300/1500	Duration	Series 8000	Duration
CM1	3 days	CM1	4 days
CM2	5 days	CM2	7 days
Series 2000	Duration	Training for Service Personnel	Duration
CM1	3 days	CMO	to be defined
CM2	5 days		
Series 396	Duration		
CM1	4 days		
CM2	7 days		

Electronics training courses

Several MTU training courses are available to help operators and other service personnel learn all about MTU electronics systems.

- ADEC - UNI
- *blue*line
- *blue*vision
- Callosum
- MCS-5
- MTU-integrated Automation
- *smart*line
- Universal

CE1

Target trainees
Operators

Prerequisites

- Knowledge of electronics
- Knowledge of course language

Course objectives

- The trainee learns:
- Design and function of electronics systems
 - How to operate the engine system
 - Basic troubleshooting

Curriculum

- Introduction of scope of electronics
- Handling of documentation and drawings
- System structure, design and operations
- Troubleshooting via "Display Navigation"

Duration

To be agreed upon

Schedule

To be agreed upon

No. of participants

Max. 8 persons

Location

MTU Training Center - Singapore

Course language

To be agreed upon

Training time

8:00 am to 4:00 pm

CE2

Target trainees
Maintenance staff

Prerequisites

- Knowledge of electronics
- Knowledge of course language

Course objectives

- The trainee learns:
- Design and function of electronics systems
 - How to operate the engine system
 - Basic troubleshooting

Curriculum

- Curriculum of course CE1
- Engine wiring and sensors
- System configuration and replacing of components
- Replacing complete units
- Introduction of the dialog unit (Basic Level)
- Data recording and error codes
- Troubleshooting via "Display Navigation and Dialog Unit"

Duration

To be agreed upon

Schedule

To be agreed upon

No. of participants

Max. 8 persons

Location

MTU Training Center - Singapore

Course language

To be agreed upon

Training time

8:00 am to 4:00 pm

CEO

Target trainees
Operators on site

Prerequisites

- A room for the theoretical training
- Availability of a training related engine
- Knowledge of course language

Course objectives

- The trainee learns:
- Design and function of electronics systems
 - How to operate the engine system
 - Basic troubleshooting

Curriculum

- Introduction of scope of electronics
- Handling of documentation and drawings
- Operating and system functions
- Troubleshooting via "Display Navigation"

Duration

To be agreed upon

Schedule

To be agreed upon

No. of participants

Max. 8 persons

Location

On site at customer's location

Course language

To be agreed upon

Training time

8:30 am to 4:30 pm

Course Designations

ECS-UNI/CE1/M

Electronics System

- ADEC - UNI
- *blue*line
- *blue*vision
- Callosum
- MCS - 5
- MTU - integrated Automation
- *smart*line
- Universal

CE1 = Course for Operating Personnel

CE2 = Course for Maintenance Personnel

CEO = Course On Site

G = GenDrive

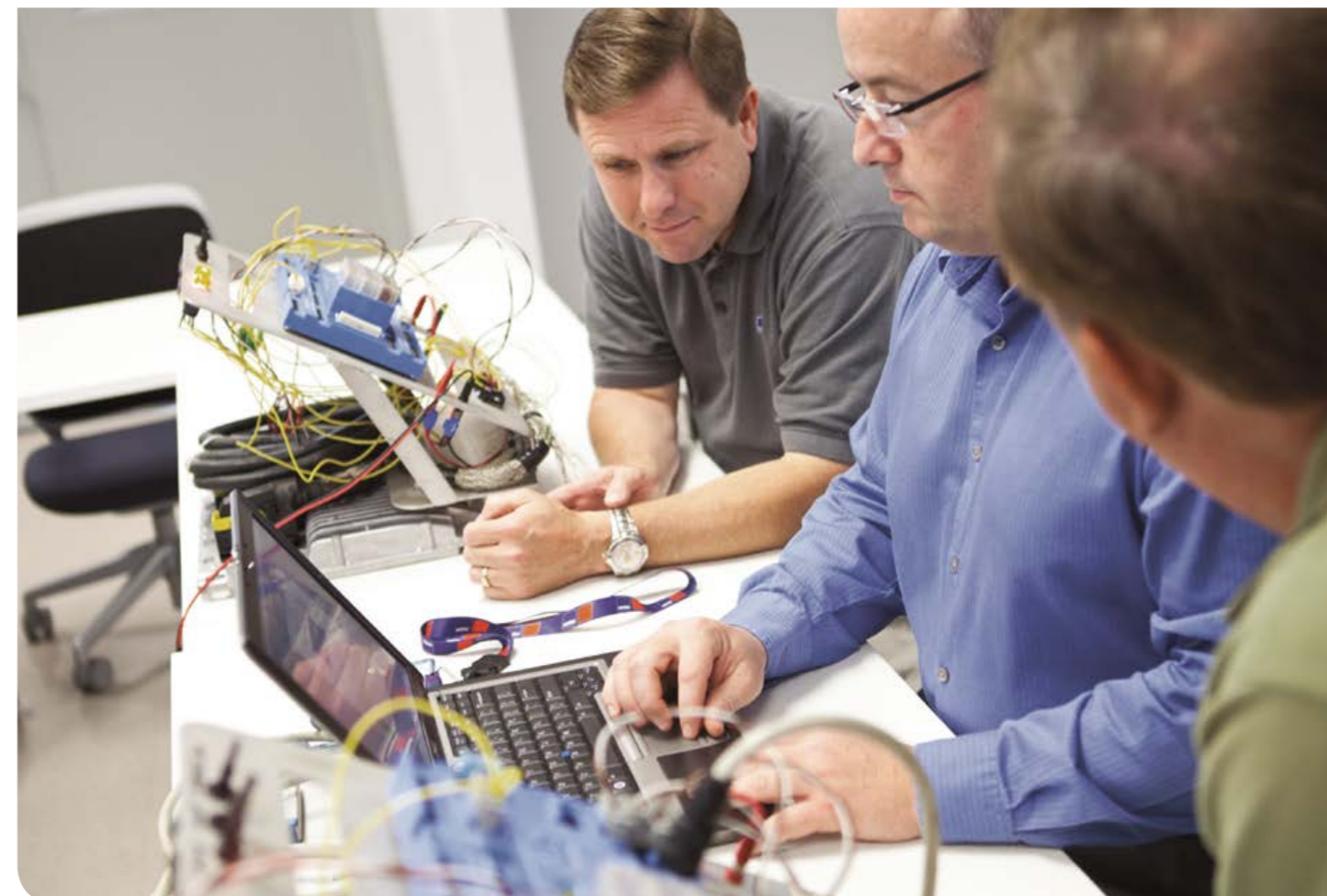
M = Marine

R = Railway

C&I = Industrial

P = Oil & Gas

T = Oil & Gas, Frac





- 1 Singapore, Asia
- 2 Detroit, USA
- 3 Friedrichshafen, Germany

Training Centers

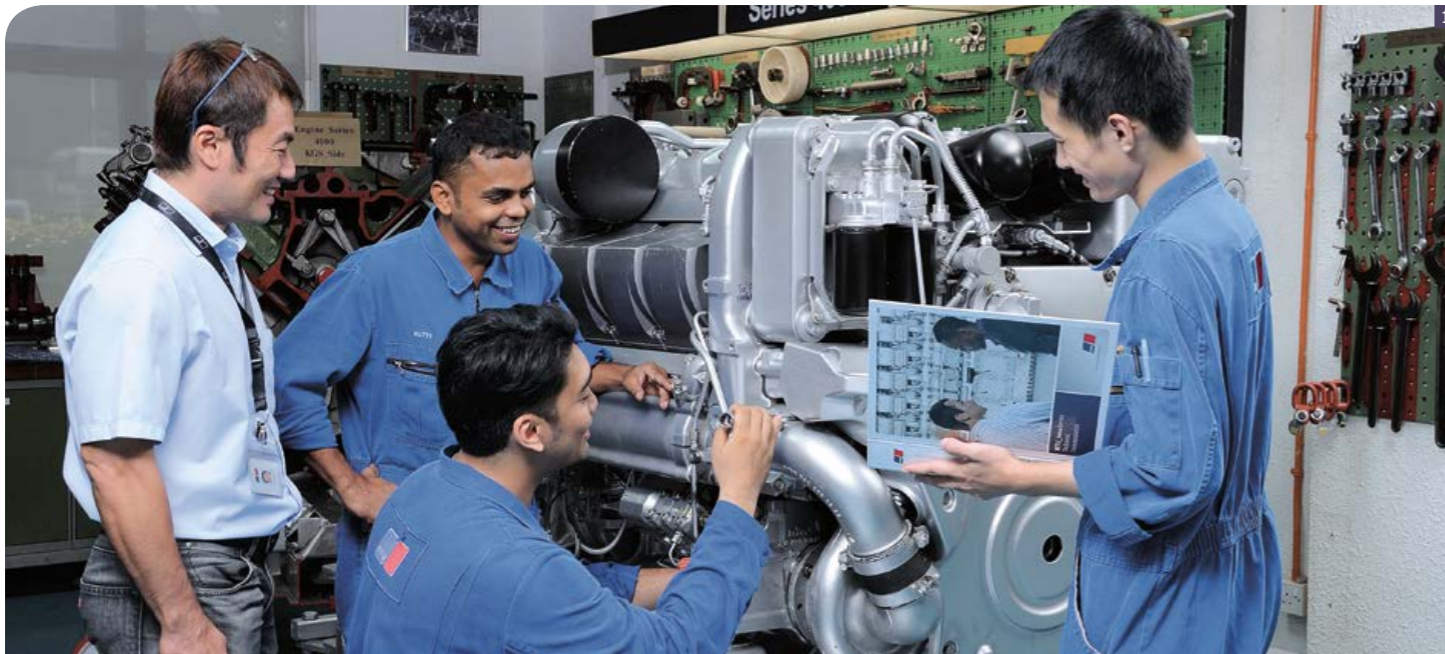
MTU Training Centers are located around the world. MTU trainers are accessible and ready to help. Wherever you need training, our facilities will be nearby. And as your company grows, so will ours. The fully customized, customer-specific training courses are offered from our three primary locations: Friedrichshafen, Germany; Detroit, USA; and Singapore. Additionally, our standardized training courses are offered at these locations:

- AUSTRALIA
- CHILE
- CHINA
- FRANCE
- INDIA
- ITALY
- JAPAN
- MALAYSIA

- THE NETHERLANDS
- NORWAY
- PERU
- RUSSIAN FEDERATION
- SOUTH AFRICA
- SPAIN
- TURKEY
- UNITED ARAB EMIRATES

MTU Training Center Singapore, Asia

Located at MTU Asia Pacific headquarters, the MTU Training Center offers customized training courses for service technicians all over the region.



1 At the MTU Training Center, trainees receive a thorough, hands-on education. MTU instructors have completed professional training and offer extensive experience.

2 Hands-on training is offered on all MTU-FN and MTU Onsite Energy electronics systems.

3 Every year, over 2,400 trainees from all over the world attend the MTU Training Center.

The MTU Training Center in Singapore is the premier training destination for operators and other service personnel in the Asia Pacific region. At over 2300 square meters, the facility is fully equipped, providing ample space for trainers, students and courses. For a hands-on learning experience, there are 20 engines on site, from the classic to the largest MTU engine—the Series 8000.

Trainees can choose from more than 15 classes, including specialized instruction for applications such as marine, C&I, mining, Gendrive and rail. Training is also offered for engine control systems, ship automation and monitoring systems and other electronics systems.

More than 6 MTU instructors are ready to pass along their expertise. Each member of the team has completed a wide range of professional training and has extensive experience in service and aftersales. Currently located at 1 Benoi Place, starting April 2015 our training location will be moved to MTU Asia's new premises, alongside with our sales department, workshop and administration.

Training Centers

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1 The MTU Training Center in Singapore

2 Learning as a team creates the ideal conditions for efficient system operation.

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You've made a powerful investment. Protect it with MTU **ValueCare**.

MTU engines and systems are built to deliver robust, reliable performance. But our commitment to your success doesn't end there. For peak performance, longer life and optimized costs, rely on MTU **ValueCare**—the only service portfolio designed specifically with your equipment in mind.

Improve performance and extend equipment life.

- Avoid the unexpected with professional service from MTU-certified technicians
- Keep your equipment running smoothly with genuine filters, oils, coolants and OEM parts
- Empower your operators and maintenance personnel with extensive, hands-on training
- Keep a good thing going with factory remanufacturing and rebuild solutions

Optimize costs without increasing risk.

- Maximize fuel economy and uptime with preventive maintenance services
- Achieve cost-certainty and optimal availability with a ValueCare Agreement
- Protect against the cost of repairs with Extended Coverage beyond the standard warranty
- Proactively monitor equipment health and activity from afar with Digital Solutions
- Spend less on parts without compromising quality through our remanufacturing program

MTU **ValueCare** products and services are available worldwide through our extensive network of more than 1,200 service locations. Contact your local service partner today and ask how MTU **ValueCare** can be customized to meet your unique needs.



Service Network

Local support. Worldwide.

Whenever and wherever you need expert support, MTU specialists are available. Our global service network of more than 1,200 locations—backed by our cutting-edge Parts Logistics Centers—provides you this assurance. To find your local MTU distributor, visit www.mtu-online.com.

Customer Assistance Center

Agents are available 24/7 for fast response to your inquiries and any service needs.

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Local support. Worldwide.

We ensure that you receive individualized support from our global network of more than 1,200 service centers—anywhere, anytime.

- Global Headquarters
- Regional Headquarters
- Sales and Customer Service Center

