NAUTIS Maritime Simulators are DNV approved integrated simulator solutions in compliance with the latest IMO requirements.
NAUTIS Simulator

NAUTIS Simulators are DNV-GL approved integrated simulator solutions satisfying the latest IMO requirements. Our advanced simulators are designed to facilitate the education and examination of our customers’ students or employees.

We offer a range of configurations, such as portable setups on a single laptop, Full Mission Bridge Simulators with interfaces to real navigation equipment and engine room components.

Core Benefits

- **Ease of use** – Simple and intuitive interface allows users to quickly operate the software.
- **Realism** – Validated hydrodynamics simulate realistic physical ship behavior.
- **Quality** – Photo-realistic render of objects and environments enhance user immersion.
- **Compatible** – Standard and open interface enable to connect NAUTIS with external equipment.

Certified Training Options

- The International Convention on Standards of Training, Certification and watchkeeping for Seafarers (or STCW)
- IMO Model Courses
- IMCA Guidance on the use of simulators (IMCA C 014 Rev. 4 – March 2015)
- Approved and certified by DNV GL – with class notation for Integrated Simulator System, Tug, HSC – to be compliant with the Class A standard for certification of Maritime simulator systems DNVGL–ST–0033 Edition April 2018 and compliant with the requirements of the STCW Convention, Regulation I/12
- Nautical Institute Accreditation for DP Training Centres running VSTEP NAUTIS Dynamic Positioning Simulators
- DNV-GL Class A Certification for Dynamic Positioning Simulators
- CESNI compliant with European Standard for Qualification in Inland Navigation edition 2018 Part IV, vessel-handling and radar simulators

Configurations

NAUTIS Simulators have a fully scalable range of options to fit our customers’ training needs and budgets. Even if our customers’ training needs are not standard, we always do our best to cater to these needs.
Exceeding Industry Standards
Our consoles are designed according to dimensions and ergonomic specifications set by class society standards for ship building. Control plates can include multiple types of propulsion and steering controls. We cooperate with well-known control suppliers whose controls are also used onboard real vessels. This results in an utmost realistic experience and makes you feel as if you are onboard an actual vessel.

Open interface for customization
This allows for the addition of customized software-developed navigation panels or nautical instruments and hardware. It is more cost-effective and versatile than buying real equipment for ships and creating hardware interfaces.

User-friendly instructor tools
Easily drag and drop ships into environments, connect towing or mooring lines, drop anchors, change vessel dynamics, view vector forces and more from different views.

High-quality support options
VSTEP customer support is supervised from our headquarters and coordinated with our strategic partners around the globe. We provide service agreements according to your needs and ensure quick and efficient help.

Less hardware, lower costs
NAUTIS Simulators are optimized to deliver high-quality certified simulator power without the need for many expensive PCs. This saves hardware costs and makes installation and support much easier.

NAUTIS Instructor Station
An Instructor Station (IS) is a mandatory element of STCW compliant simulators. The NAUTIS IS allows an instructor to follow trainee’s decisions and actions during each simulator training session. This also includes an after action review and assessment. It interfaces seamlessly with all NAUTIS Simulator configurations.

The setup of the NAUTIS IS consists of displays on which the outside view and navigation screens of the trainee are duplicated in real-time. This intuitive tool facilitates a high degree of control, which benefits the education and examination of our customers’ students or employees.

Training goals:
- Select a training environment and drag-and-drop objects in it.
- Save scenarios for later use.
- Access a 3D bird’s eye view of the environment and a 2D chart view.
- Assign trainees that are logged into the exercise to one of the vessels.
- Change the weather conditions, visibility and time of day.
- Show a trail of all the ship’s movements.
- Shift any of the vessels to a different position.
- Assist in mooring operations by creating mooring lines.
- Assist in anchoring operations by operating winches.
- Operate tugs and their lines for towage assistance.
- Add new target vessels and set their speed and direction.
- Change the track of the target vessels and helicopters.
Excellent training and support are an important part of operating a simulator. As part of a simulator delivery, VSTEP provides basic and advanced training courses for each customer.

Simulator technical support and maintenance training:
- Simulator Start-up / Shut down, facility specific circumstances.
- Overview of hardware and software connections.
- Calibration and assignment of controls.
- Interface check and finetuning for Radar, ECDIS and GMDSS simulator.
- How to detect / remedy hardware issues.
- Organize scenario storage and session recordings.
- Back-up / restoring of configuration files.
- Remote log-in facilities and simulator optimization.

Simulator and instructor station training:
- Creation of scenarios.
- Exercise Recording and playback / debriefing.
- Initiate / restart an exercise.
- Controlling target vessels during an exercise.
- Introduce ship equipment or sensor faults and failures.
- Change the operating environment conditions during an exercise.
- Communication with the trainees on relevant comms channels.
- Simulator application in training, assessment and examination.
- Visual tracking of an exercise in both 3D view and on chart.
- Setting up a scoring or grading system to assess student performance.

Our GMDSS simulator is available in a single setup, which can be extended to a classroom environment or integrated in any other simulator configuration.
ABOUT

NAUTIS is a product of VSTEP, an ISO9001:2019 certified company based in Rotterdam, the Netherlands. We strive to enable learning by simulation with innovative solutions and aim to ensure that at least one-third of the maritime industry has obtained their skills through our simulation technology.